Fig. 1

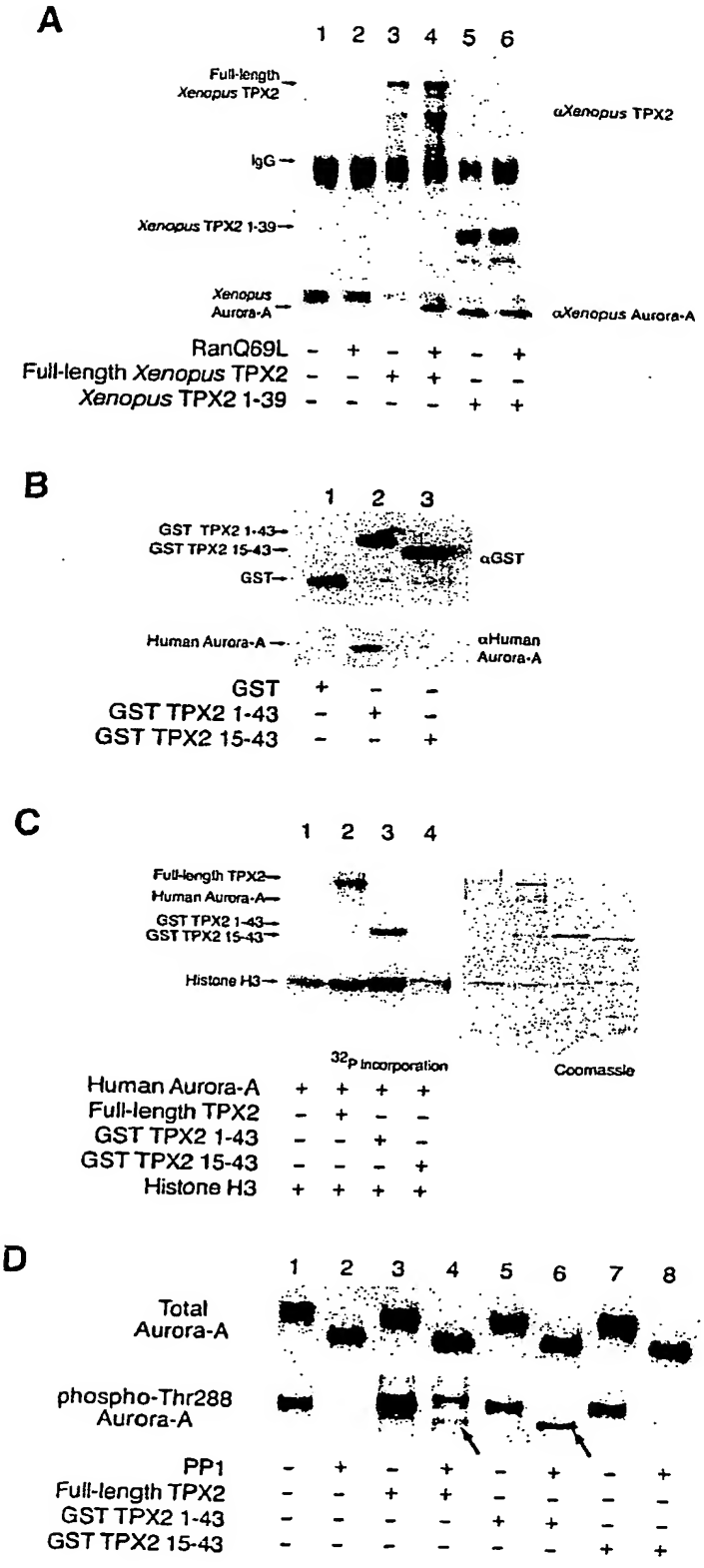

A
1 2 3 4 5 6
Full-length Xenopus TPX2
αXenopus TPX2
IgG
Xenopus TPX2 1-39
Xenopus Aurora-A
αXenopus Aurora-A
RanQ69L - + - + - +
Full-length Xenopus TPX2 - - + + - -
Xenopus TPX2 1-39 - - - - + +
B
1 2 3
GST TPX2 1-43
GST TPX2 15-43
GST
αGST
Human Aurora-A
αHuman Aurora-A
GST + - -
GST TPX2 1-43 - + -
GST TPX2 15-43 - - +
C
1 2 3 4
Full-length TPX2
Human Aurora-A
GST TPX2 1-43
GST TPX2 15-43
Histone H3
32P incorporation
Coomassie
Human Aurora-A + + + +
Full-length TPX2 - + - -
GST TPX2 1-43 - - + -
GST TPX2 15-43 - - - +
Histone H3 + + + +
D
1 2 3 4 5 6 7 8
Total Aurora-A
phospho-Thr288 Aurora-A
PP1 - + - + - + - +
Full-length TPX2 - - + + - - - -
GST TPX2 1-43 - - - - + + - -
GST TPX2 15-43 - - - - - - + +

Fig. 2

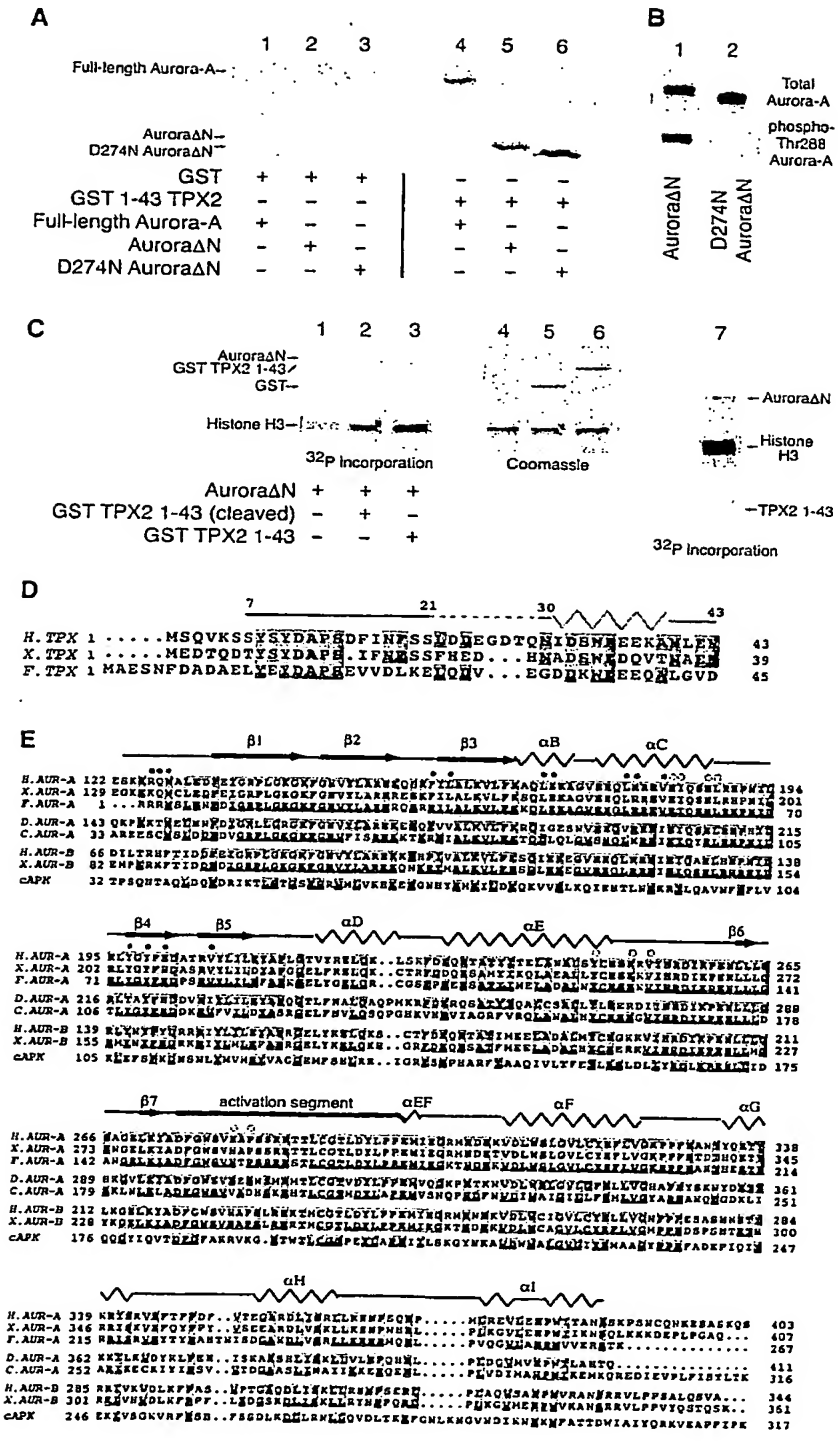

A
1 2 3 4 5 6
Full-length Aurora-A
AuroraΔN
D274N AuroraΔN
GST + + + – – –
GST 1-43 TPX2 – – – + + +
Full-length Aurora-A + – – + – –
AuroraΔN – + – – + –
D274N AuroraΔN – – + – – +
B
1 2
Total Aurora-A
phospho-Thr288 Aurora-A
AuroraΔN
D274N AuroraΔN
C
1 2 3 4 5 6 7
AuroraΔN
GST TPX2 1-43
GST
Histone H3
32P Incorporation
Coomassle
AuroraΔN + + +
GST TPX2 1-43 (cleaved) – + –
GST TPX2 1-43 – – +
AuroraΔN
Histone H3
TPX2 1-43
32P Incorporation
D
H. TPX
X. TPX
F. TPX
E
β1 β2 β3 αB αC
β4 β5 αD αE β6
β7 activation segment αEF αF αG
αH αI
H.AUR-A
X.AUR-A
F.AUR-A
D.AUR-A
C.AUR-A
H.AUR-B
X.AUR-B
cAPK

Fig. 3

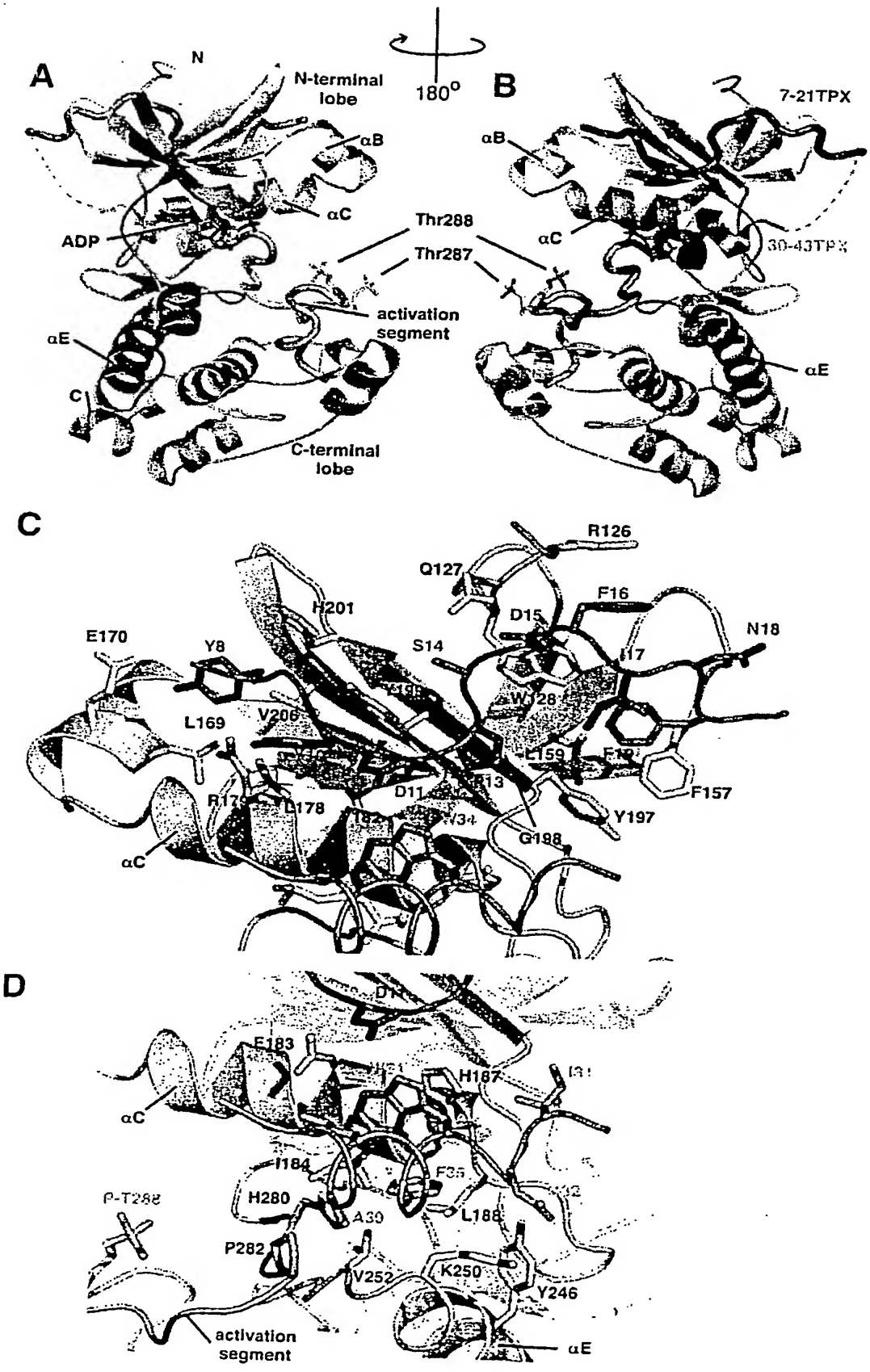
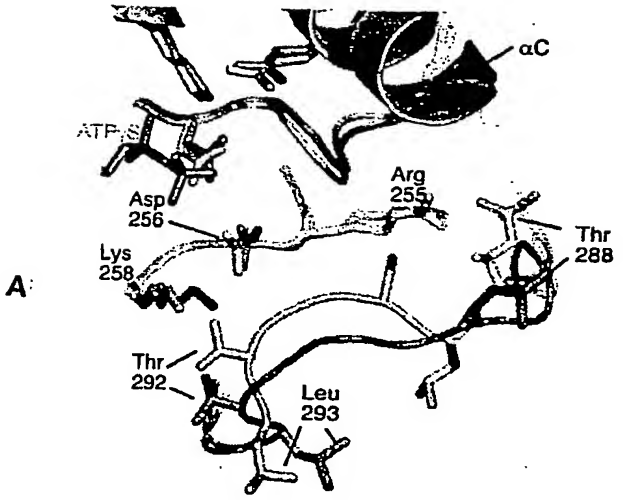
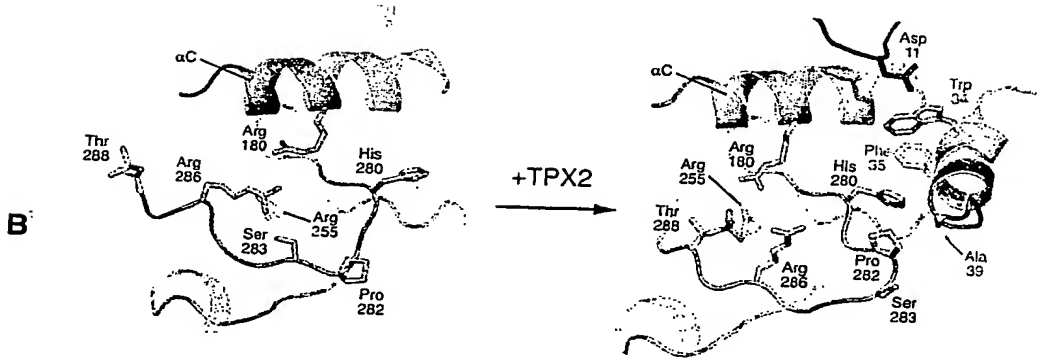

A
N
N-terminal lobe
αB
αC
ADP
Thr288
Thr287
activation segment
αE
C
C-terminal lobe
180°
B
7-21TPX
αB
αC
30-43TPX
αE
C
R126
Q127
F16
D15
H201
E170
Y8
S14
N18
I17
W128
L169
V206
L159
F157
D11
R13
R179
L178
Y197
G198
αC
D
E183
H187
αC
I184
F35
P-T288
H280
A30
L188
P282
V252
K250
Y246
activation segment
αE

Fig. 4


A
αC
ATP-S
Asp 256
Arg 255
Lys 258
Thr 288
Thr 292
Leu 293


B
αC
Thr 288
Arg 286
Arg 180
His 280
Ser 283
Arg 255
Pro 282
+TPX2
Asp 11
Trp 34
Phe 35
Ala 39

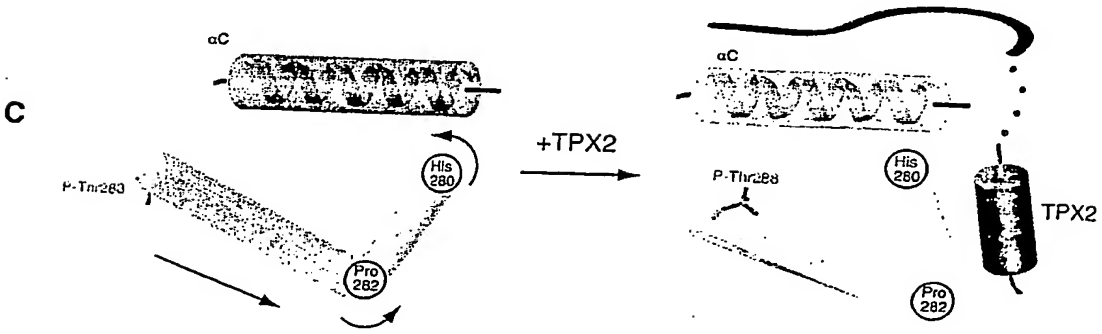

C
αC
P-Thr288
His 280
Pro 282
+TPX2
TPX2

Fig. 5

Table A

ATOM	1	CB	GLN	A	127	267.519	-61.189	87.734	1.00	66.58	A	C
ATOM	2	CG	GLN	A	127	266.971	-61.391	86.330	1.00	76.29	A	C
ATOM	3	CD	GLN	A	127	266.372	-60.121	85.741	1.00	79.34	A	C
ATOM	4	OE1	GLN	A	127	265.589	-60.183	84.781	1.00	82.34	A	O
ATOM	5	NE2	GLN	A	127	266.735	-58.962	86.307	1.00	82.40	A	N
ATOM	6	C	GLN	A	127	269.192	-59.883	89.051	1.00	63.35	A	C
ATOM	7	O	GLN	A	127	269.877	-58.853	89.024	1.00	70.04	A	O
ATOM	8	N	GLN	A	127	269.910	-61.949	87.808	1.00	58.04	A	N
ATOM	9	CA	GLN	A	127	269.002	-60.755	87.810	1.00	67.74	A	C
ATOM	10	N	TRP	A	128	268.566	-60.307	90.137	1.00	61.21	A	N
ATOM	11	CA	TRP	A	128	268.621	-59.552	91.366	1.00	53.96	A	C
ATOM	12	CB	TRP	A	128	267.315	-59.733	92.133	1.00	50.38	A	C
ATOM	13	CG	TRP	A	128	266.140	-59.256	91.369	1.00	49.11	A	C
ATOM	14	CD2	TRP	A	128	265.908	-57.928	90.897	1.00	50.34	A	C
ATOM	15	CE2	TRP	A	128	264.697	-57.962	90.150	1.00	53.33	A	C
ATOM	16	CE3	TRP	A	128	266.611	-56.713	91.017	1.00	53.44	A	C
ATOM	17	CD1	TRP	A	128	265.096	-60.014	90.921	1.00	47.17	A	C
ATOM	18	NE1	TRP	A	128	264.228	-59.249	90.191	1.00	49.20	A	N
ATOM	19	CZ2	TRP	A	128	264.160	-56.816	89.514	1.00	56.77	A	C
ATOM	20	CZ3	TRP	A	128	266.094	-55.571	90.392	1.00	60.23	A	C
ATOM	21	CH2	TRP	A	128	264.869	-55.633	89.639	1.00	61.57	A	C
ATOM	22	C	TRP	A	128	269.787	-59.909	92.262	1.00	54.43	A	C
ATOM	23	O	TRP	A	128	270.317	-61.026	92.231	1.00	54.76	A	O
ATOM	24	N	ALA	A	129	270.184	-58.955	93.085	1.00	55.48	A	N
ATOM	25	CA	ALA	A	129	271.283	-59.206	94.006	1.00	60.01	A	C
ATOM	26	CB	ALA	A	129	272.608	-58.800	93.341	1.00	66.60	A	C
ATOM	27	C	ALA	A	129	271.010	-58.371	95.258	1.00	56.86	A	C
ATOM	28	O	ALA	A	129	270.365	-57.326	95.173	1.00	59.08	A	O
ATOM	29	N	LEU	A	130	271.517	-58.821	96.401	1.00	51.68	A	N
ATOM	30	CA	LEU	A	130	271.314	-58.126	97.665	1.00	53.06	A	C
ATOM	31	CB	LEU	A	130	272.108	-58.770	98.787	1.00	43.18	A	C
ATOM	32	CG	LEU	A	130	272.080	-58.110	100.164	1.00	36.68	A	C
ATOM	33	CD1	LEU	A	130	270.621	-57.934	100.570	1.00	47.13	A	C
ATOM	34	CD2	LEU	A	130	272.839	-58.975	101.186	1.00	38.64	A	C
ATOM	35	C	LEU	A	130	271.750	-56.702	97.591	1.00	55.17	A	C
ATOM	36	O	LEU	A	130	271.223	-55.834	98.305	1.00	61.19	A	O
ATOM	37	N	GLU	A	131	272.686	-56.469	96.690	1.00	58.94	A	N
ATOM	38	CA	GLU	A	131	273.276	-55.172	96.539	1.00	57.04	A	C
ATOM	39	CB	GLU	A	131	274.689	-55.400	96.030	1.00	63.45	A	C
ATOM	40	CG	GLU	A	131	275.441	-56.450	96.938	1.00	73.38	A	C
ATOM	41	CD	GLU	A	131	275.249	-57.909	96.486	1.00	79.54	A	C
ATOM	42	OE1	GLU	A	131	274.529	-58.142	95.477	1.00	80.97	A	O
ATOM	43	OE2	GLU	A	131	275.838	-58.820	97.135	1.00	88.53	A	O
ATOM	44	C	GLU	A	131	272.458	-54.235	95.682	1.00	55.07	A	C
ATOM	45	O	GLU	A	131	272.851	-53.119	95.439	1.00	51.83	A	O
ATOM	46	N	ASP	A	132	271.280	-54.704	95.299	1.00	53.60	A	N
ATOM	47	CA	ASP	A	132	270.298	-53.994	94.487	1.00	58.59	A	C
ATOM	48	CB	ASP	A	132	269.514	-54.987	93.656	1.00	69.09	A	C
ATOM	49	CG	ASP	A	132	270.030	-55.141	92.284	1.00	68.36	A	C
ATOM	50	OD1	ASP	A	132	269.776	-54.250	91.447	1.00	73.44	A	O
ATOM	51	OD2	ASP	A	132	270.704	-56.159	92.048	1.00	76.16	A	O
ATOM	52	C	ASP	A	132	269.267	-53.412	95.449	1.00	59.74	A	C
ATOM	53	O	ASP	A	132	268.472	-52.547	95.093	1.00	56.43	A	O
ATOM	54	N	PHE	A	133	269.239	-53.925	96.666	1.00	62.15	A	N
ATOM	55	CA	PHE	A	133	268.239	-53.448	97.598	1.00	62.91	A	C
ATOM	56	CB	PHE	A	133	267.324	-54.622	97.974	1.00	59.55	A	C
ATOM	57	CG	PHE	A	133	266.737	-55.337	96.775	1.00	61.26	A	C
ATOM	58	CD1	PHE	A	133	267.467	-56.312	96.095	1.00	60.00	A	C
ATOM	59	CD2	PHE	A	133	265.442	-55.059	96.346	1.00	60.03	A	C
ATOM	60	CE1	PHE	A	133	266.910	-56.996	94.991	1.00	65.06	A	C
ATOM	61	CE2	PHE	A	133	264.883	-55.719	95.264	1.00	60.82	A	C
ATOM	62	CZ	PHE	A	133	265.607	-56.697	94.585	1.00	61.32	A	C

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ATOM     63  C   PHE A 133     268.740 -52.733  98.847  1.00 61.07      A    C
ATOM     64  O   PHE A 133     269.866 -52.972  99.318  1.00 66.24      A    O
ATOM     65  N   GLU A 134     267.878 -51.829  99.340  1.00 59.55      A    N
ATOM     66  CA  GLU A 134     268.062 -51.035 100.573  1.00 58.90      A    C
ATOM     67  CB  GLU A 134     267.589 -49.593 100.353  1.00 54.77      A    C
ATOM     68  CG  GLU A 134     268.478 -48.772  99.488  1.00 63.45      A    C
ATOM     69  CD  GLU A 134     268.205 -47.282  99.556  1.00 61.84      A    C
ATOM     70  OE1 GLU A 134     268.808 -46.576 100.384  1.00 75.06      A    O
ATOM     71  OE2 GLU A 134     267.388 -46.803  98.768  1.00 73.27      A    O
ATOM     72  C   GLU A 134     267.139 -51.698 101.627  1.00 53.85      A    C
ATOM     73  O   GLU A 134     265.909 -51.607 101.526  1.00 60.03      A    O
ATOM     74  N   ILE A 135     267.713 -52.362 102.621  1.00 52.32      A    N
ATOM     75  CA  ILE A 135     266.917 -53.042 103.625  1.00 50.89      A    C
ATOM     76  CB  ILE A 135     267.750 -54.131 104.343  1.00 48.23      A    C
ATOM     77  CG2 ILE A 135     266.828 -55.078 105.127  1.00 51.35      A    C
ATOM     78  CG1 ILE A 135     268.552 -54.940 103.317  1.00 48.00      A    C
ATOM     79  CD1 ILE A 135     267.731 -55.720 102.398  1.00 35.46      A    C
ATOM     80  C   ILE A 135     266.298 -52.129 104.674  1.00 50.54      A    C
ATOM     81  O   ILE A 135     266.973 -51.281 105.250  1.00 50.32      A    O
ATOM     82  N   GLY A 136     265.004 -52.334 104.924  1.00 49.85      A    N
ATOM     83  CA  GLY A 136     264.286 -51.534 105.903  1.00 44.78      A    C
ATOM     84  C   GLY A 136     264.165 -52.255 107.228  1.00 44.85      A    C
ATOM     85  O   GLY A 136     265.040 -53.071 107.574  1.00 45.10      A    O
ATOM     86  N   ARG A 137     263.071 -51.996 107.940  1.00 40.54      A    N
ATOM     87  CA  ARG A 137     262.891 -52.598 109.248  1.00 47.22      A    C
ATOM     88  CB  ARG A 137     261.911 -51.766 110.065  1.00 46.15      A    C
ATOM     89  CG  ARG A 137     260.481 -51.887 109.585  1.00 46.77      A    C
ATOM     90  CD  ARG A 137     259.521 -51.284 110.589  1.00 47.76      A    C
ATOM     91  NE  ARG A 137     258.174 -51.283 110.058  1.00 44.18      A    N
ATOM     92  CZ  ARG A 137     257.364 -52.330 110.097  1.00 49.13      A    C
ATOM     93  NH1 ARG A 137     257.779 -53.468 110.655  1.00 50.41      A    N
ATOM     94  NH2 ARG A 137     256.144 -52.230 109.579  1.00 42.98      A    N
ATOM     95  C   ARG A 137     262.358 -54.014 109.150  1.00 48.40      A    C
ATOM     96  O   ARG A 137     261.734 -54.370 108.150  1.00 52.53      A    O
ATOM     97  N   PRO A 138     262.589 -54.840 110.190  1.00 48.54      A    N
ATOM     98  CD  PRO A 138     263.443 -54.581 111.363  1.00 46.06      A    C
ATOM     99  CA  PRO A 138     262.108 -56.226 110.213  1.00 46.02      A    C
ATOM    100  CB  PRO A 138     262.685 -56.765 111.524  1.00 49.55      A    C
ATOM    101  CG  PRO A 138     263.905 -55.955 111.710  1.00 42.97      A    C
ATOM    102  C   PRO A 138     260.561 -56.262 110.207  1.00 49.85      A    C
ATOM    103  O   PRO A 138     259.920 -55.810 111.142  1.00 50.42      A    O
ATOM    104  N   LEU A 139     259.980 -56.799 109.138  1.00 45.75      A    N
ATOM    105  CA  LEU A 139     258.545 -56.896 109.005  1.00 39.58      A    C
ATOM    106  CB  LEU A 139     258.181 -57.130 107.558  1.00 37.24      A    C
ATOM    107  CG  LEU A 139     258.109 -55.885 106.664  1.00 42.68      A    C
ATOM    108  CD1 LEU A 139     257.816 -56.315 105.170  1.00 32.13      A    C
ATOM    109  CD2 LEU A 139     256.990 -54.961 107.170  1.00 43.77      A    C
ATOM    110  C   LEU A 139     257.968 -58.002 109.880  1.00 40.81      A    C
ATOM    111  O   LEU A 139     256.907 -57.861 110.480  1.00 45.92      A    O
ATOM    112  N   GLY A 140     258.675 -59.111 109.970  1.00 45.15      A    N
ATOM    113  CA  GLY A 140     258.198 -60.218 110.789  1.00 48.82      A    C
ATOM    114  C   GLY A 140     259.222 -61.317 111.040  1.00 48.37      A    C
ATOM    115  O   GLY A 140     260.326 -61.310 110.492  1.00 53.08      A    O
ATOM    116  N   LYS A 141     258.842 -62.283 111.856  1.00 52.66      A    N
ATOM    117  CA  LYS A 141     259.740 -63.376 112.192  1.00 56.79      A    C
ATOM    118  CB  LYS A 141     259.961 -63.404 113.707  1.00 61.89      A    C
ATOM    119  CG  LYS A 141     260.862 -64.513 114.210  1.00 68.25      A    C
ATOM    120  CD  LYS A 141     260.894 -64.538 115.750  1.00 78.79      A    C
ATOM    121  CE  LYS A 141     261.863 -65.624 116.242  1.00 83.42      A    C
ATOM    122  NZ  LYS A 141     261.987 -65.651 117.745  1.00 90.84      A    N
ATOM    123  C   LYS A 141     259.219 -64.728 111.704  1.00 57.82      A    C
ATOM    124  O   LYS A 141     258.150 -65.199 112.084  1.00 57.17      A    O
ATOM    125  N   GLY A 142     259.990 -65.342 110.823  1.00 63.79      A    N
ATOM    126  CA  GLY A 142     259.627 -66.648 110.315  1.00 67.77      A    C
ATOM    127  C   GLY A 142     260.381 -67.717 111.087  1.00 68.12      A    C
ATOM    128  O   GLY A 142     260.756 -67.533 112.255  1.00 76.19      A    O
ATOM    129  N   LYS A 143     260.638 -68.829 110.410  1.00 66.29      A    N
ATOM    130  CA  LYS A 143     261.359 -69.941 111.016  1.00 62.91      A    C
ATOM    131  CB  LYS A 143     260.576 -71.221 110.783  1.00 56.50      A    C
ATOM    132  CG  LYS A 143     260.990 -72.331 111.694  1.00 59.59      A    C
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ATOM    133  CD  LYS A 143     259.804 -73.170 112.130  1.00 65.95      A    C
ATOM    134  CE  LYS A 143     260.182 -74.141 113.303  1.00 69.37      A    C
ATOM    135  NZ  LYS A 143     259.069 -75.109 113.596  1.00 70.95      A    N
ATOM    136  C   LYS A 143     262.773 -70.081 110.500  1.00 62.52      A    C
ATOM    137  O   LYS A 143     263.725 -70.302 111.243  1.00 61.60      A    O
ATOM    138  N   PHE A 144     262.909 -69.898 109.200  1.00 68.60      A    N
ATOM    139  CA  PHE A 144     264.215 -70.021 108.556  1.00 74.62      A    C
ATOM    140  CB  PHE A 144     264.109 -70.886 107.296  1.00 69.32      A    C
ATOM    141  CG  PHE A 144     263.583 -72.278 107.565  1.00 69.58      A    C
ATOM    142  CD1 PHE A 144     262.211 -72.526 107.690  1.00 66.23      A    C
ATOM    143  CD2 PHE A 144     264.460 -73.335 107.731  1.00 63.51      A    C
ATOM    144  CE1 PHE A 144     261.738 -73.816 107.978  1.00 73.24      A    C
ATOM    145  CE2 PHE A 144     263.985 -74.608 108.014  1.00 69.83      A    C
ATOM    146  CZ  PHE A 144     262.629 -74.850 108.138  1.00 66.31      A    C
ATOM    147  C   PHE A 144     264.768 -68.665 108.234  1.00 74.80      A    C
ATOM    148  O   PHE A 144     265.636 -68.496 107.395  1.00 82.71      A    O
ATOM    149  N   GLY A 145     264.248 -67.691 108.955  1.00 83.57      A    N
ATOM    150  CA  GLY A 145     264.676 -66.320 108.782  1.00 77.10      A    C
ATOM    151  C   GLY A 145     263.544 -65.296 108.827  1.00 75.14      A    C
ATOM    152  O   GLY A 145     262.338 -65.557 108.521  1.00 74.64      A    O
ATOM    153  N   ASN A 146     263.966 -64.097 109.195  1.00 67.46      A    N
ATOM    154  CA  ASN A 146     263.050 -62.976 109.318  1.00 65.84      A    C
ATOM    155  CB  ASN A 146     263.674 -61.895 110.208  1.00 68.52      A    C
ATOM    156  CG  ASN A 146     263.873 -62.369 111.664  1.00 74.23      A    C
ATOM    157  OD1 ASN A 146     264.045 -63.577 111.946  1.00 76.10      A    O
ATOM    158  ND2 ASN A 146     263.871 -61.415 112.588  1.00 74.93      A    N
ATOM    159  C   ASN A 146     262.727 -62.402 107.955  1.00 60.10      A    C
ATOM    160  O   ASN A 146     263.442 -62.661 106.979  1.00 60.40      A    O
ATOM    161  N   VAL A 147     261.651 -61.614 107.909  1.00 49.34      A    N
ATOM    162  CA  VAL A 147     261.208 -60.938 106.697  1.00 34.29      A    C
ATOM    163  CB  VAL A 147     259.691 -61.195 106.433  1.00 35.55      A    C
ATOM    164  CG1 VAL A 147     259.202 -60.303 105.293  1.00 22.76      A    C
ATOM    165  CG2 VAL A 147     259.444 -62.657 106.040  1.00 25.36      A    C
ATOM    166  C   VAL A 147     261.432 -59.427 106.905  1.00 36.01      A    C
ATOM    167  O   VAL A 147     261.071 -58.888 107.912  1.00 33.80      A    O
ATOM    168  N   TYR A 148     262.006 -58.743 105.931  1.00 38.73      A    N
ATOM    169  CA  TYR A 148     262.298 -57.313 106.040  1.00 38.16      A    C
ATOM    170  CB  TYR A 148     263.815 -57.053 105.947  1.00 44.86      A    C
ATOM    171  CG  TYR A 148     264.625 -57.783 106.981  1.00 51.34      A    C
ATOM    172  CD1 TYR A 148     264.946 -59.110 106.823  1.00 49.12      A    C
ATOM    173  CE1 TYR A 148     265.660 -59.799 107.804  1.00 57.49      A    C
ATOM    174  CD2 TYR A 148     265.035 -57.152 108.146  1.00 56.42      A    C
ATOM    175  CE2 TYR A 148     265.743 -57.839 109.136  1.00 62.05      A    C
ATOM    176  CZ  TYR A 148     266.051 -59.159 108.958  1.00 59.22      A    C
ATOM    177  OH  TYR A 148     266.740 -59.818 109.951  1.00 62.90      A    O
ATOM    178  C   TYR A 148     261.647 -56.485 104.972  1.00 40.31      A    C
ATOM    179  O   TYR A 148     261.240 -56.989 103.910  1.00 39.68      A    O
ATOM    180  N   LEU A 149     261.564 -55.187 105.254  1.00 37.70      A    N
ATOM    181  CA  LEU A 149     260.992 -54.236 104.287  1.00 36.17      A    C
ATOM    182  CB  LEU A 149     260.495 -52.976 105.019  1.00 38.73      A    C
ATOM    183  CG  LEU A 149     259.781 -51.920 104.186  1.00 39.39      A    C
ATOM    184  CD1 LEU A 149     258.437 -52.465 103.793  1.00 46.05      A    C
ATOM    185  CD2 LEU A 149     259.655 -50.660 104.957  1.00 40.68      A    C
ATOM    186  C   LEU A 149     262.212 -53.920 103.405  1.00 35.83      A    C
ATOM    187  O   LEU A 149     263.340 -54.217 103.822  1.00 37.60      A    O
ATOM    188  N   ALA A 150     262.029 -53.321 102.228  1.00 37.02      A    N
ATOM    189  CA  ALA A 150     263.171 -53.041 101.363  1.00 35.35      A    C
ATOM    190  CB  ALA A 150     263.889 -54.345 100.965  1.00 48.80      A    C
ATOM    191  C   ALA A 150     262.746 -52.334 100.123  1.00 44.17      A    C
ATOM    192  O   ALA A 150     261.665 -52.604  99.566  1.00 41.00      A    O
ATOM    193  N   ARG A 151     263.619 -51.441  99.666  1.00 47.00      A    N
ATOM    194  CA  ARG A 151     263.319 -50.674  98.468  1.00 50.37      A    C
ATOM    195  CB  ARG A 151     263.377 -49.171  98.793  1.00 53.91      A    C
ATOM    196  CG  ARG A 151     262.912 -48.272  97.649  1.00 53.96      A    C
ATOM    197  CD  ARG A 151     262.884 -46.817  98.014  1.00 57.39      A    C
ATOM    198  NE  ARG A 151     264.145 -46.372  98.607  1.00 58.37      A    N
ATOM    199  CZ  ARG A 151     264.561 -45.110  98.572  1.00 58.07      A    C
ATOM    200  NH1 ARG A 151     263.814 -44.175  97.969  1.00 56.20      A    N
ATOM    201  NH2 ARG A 151     265.718 -44.793  99.131  1.00 55.48      A    N
ATOM    202  C   ARG A 151     264.311 -51.021  97.348  1.00 55.38      A    C
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ATOM    203  O   ARG A 151     265.503 -51.247  97.625  1.00 60.78      A    O
ATOM    204  N   GLU A 152     263.826 -51.059  96.105  1.00 54.28      A    N
ATOM    205  CA  GLU A 152     264.664 -51.366  94.972  1.00 54.46      A    C
ATOM    206  CB  GLU A 152     263.811 -51.817  93.823  1.00 60.23      A    C
ATOM    207  CG  GLU A 152     264.520 -52.780  92.888  1.00 67.69      A    C
ATOM    208  CD  GLU A 152     265.617 -52.120  92.087  1.00 75.21      A    C
ATOM    209  OE1 GLU A 152     266.773 -52.020  92.593  1.00 78.70      A    O
ATOM    210  OE2 GLU A 152     265.305 -51.689  90.951  1.00 76.28      A    O
ATOM    211  C   GLU A 152     265.436 -50.117  94.598  1.00 54.18      A    C
ATOM    212  O   GLU A 152     264.868 -49.045  94.388  1.00 55.50      A    O
ATOM    213  N   LYS A 153     266.746 -50.275  94.489  1.00 55.96      A    N
ATOM    214  CA  LYS A 153     267.583 -49.115  94.231  1.00 57.21      A    C
ATOM    215  CB  LYS A 153     269.059 -49.471  94.257  1.00 56.21      A    C
ATOM    216  CG  LYS A 153     269.661 -49.042  95.586  1.00 49.03      A    C
ATOM    217  CD  LYS A 153     270.821 -49.929  95.975  1.00 56.59      A    C
ATOM    218  CE  LYS A 153     271.022 -49.981  97.450  1.00 62.23      A    C
ATOM    219  NZ  LYS A 153     272.289 -50.704  97.804  1.00 63.82      A    N
ATOM    220  C   LYS A 153     267.300 -48.233  93.056  1.00 60.69      A    C
ATOM    221  O   LYS A 153     267.418 -47.029  93.188  1.00 68.16      A    O
ATOM    222  N   GLN A 154     266.890 -48.704  91.909  1.00 60.83      A    N
ATOM    223  CA  GLN A 154     266.722 -47.630  90.954  1.00 60.63      A    C
ATOM    224  CB  GLN A 154     267.313 -48.015  89.612  1.00 65.34      A    C
ATOM    225  CG  GLN A 154     268.585 -48.908  89.762  1.00 73.31      A    C
ATOM    226  CD  GLN A 154     268.842 -49.643  88.514  1.00 76.62      A    C
ATOM    227  OE1 GLN A 154     268.751 -49.059  87.368  1.00 77.22      A    O
ATOM    228  NE2 GLN A 154     269.150 -50.963  88.658  1.00 79.75      A    N
ATOM    229  C   GLN A 154     265.288 -47.279  90.868  1.00 58.41      A    C
ATOM    230  O   GLN A 154     264.929 -46.135  90.760  1.00 66.80      A    O
ATOM    231  N   SER A 155     264.465 -48.297  91.026  1.00 63.11      A    N
ATOM    232  CA  SER A 155     263.012 -48.182  90.986  1.00 57.08      A    C
ATOM    233  CB  SER A 155     262.438 -49.593  90.891  1.00 57.59      A    C
ATOM    234  OG  SER A 155     261.096 -49.532  90.511  1.00 71.09      A    O
ATOM    235  C   SER A 155     262.393 -47.454  92.192  1.00 54.17      A    C
ATOM    236  O   SER A 155     261.494 -46.653  92.054  1.00 41.48      A    O
ATOM    237  N   LYS A 156     262.919 -47.739  93.368  1.00 54.36      A    N
ATOM    238  CA  LYS A 156     262.415 -47.187  94.614  1.00 65.54      A    C
ATOM    239  CB  LYS A 156     262.133 -45.687  94.476  1.00 68.88      A    C
ATOM    240  CG  LYS A 156     263.375 -44.809  94.527  1.00 68.98      A    C
ATOM    241  CD  LYS A 156     263.018 -43.342  94.698  1.00 65.67      A    C
ATOM    242  CE  LYS A 156     262.170 -42.850  93.529  1.00 62.20      A    C
ATOM    243  NZ  LYS A 156     261.774 -41.416  93.679  1.00 56.13      A    N
ATOM    244  C   LYS A 156     261.138 -47.958  95.009  1.00 64.77      A    C
ATOM    245  O   LYS A 156     260.317 -47.485  95.803  1.00 68.30      A    O
ATOM    246  N   PHE A 157     261.012 -49.159  94.446  1.00 62.48      A    N
ATOM    247  CA  PHE A 157     259.891 -50.051  94.679  1.00 52.64      A    C
ATOM    248  CB  PHE A 157     259.878 -51.110  93.580  1.00 54.51      A    C
ATOM    249  CG  PHE A 157     258.621 -51.933  93.525  1.00 52.32      A    C
ATOM    250  CD1 PHE A 157     257.665 -51.694  92.549  1.00 54.81      A    C
ATOM    251  CD2 PHE A 157     258.395 -52.950  94.448  1.00 55.89      A    C
ATOM    252  CE1 PHE A 157     256.499 -52.451  92.487  1.00 53.63      A    C
ATOM    253  CE2 PHE A 157     257.232 -53.719  94.401  1.00 54.27      A    C
ATOM    254  CZ  PHE A 157     256.286 -53.467  93.419  1.00 58.00      A    C
ATOM    255  C   PHE A 157     260.015 -50.719  96.056  1.00 51.79      A    C
ATOM    256  O   PHE A 157     261.020 -51.370  96.340  1.00 47.35      A    O
ATOM    257  N   ILE A 158     258.996 -50.539  96.900  1.00 50.33      A    N
ATOM    258  CA  ILE A 158     258.997 -51.137  98.212  1.00 48.14      A    C
ATOM    259  CB  ILE A 158     258.329 -50.196  99.284  1.00 48.26      A    C
ATOM    260  CG2 ILE A 158     257.863 -50.988 100.478  1.00 42.57      A    C
ATOM    261  CG1 ILE A 158     259.382 -49.205  99.795  1.00 48.74      A    C
ATOM    262  CD1 ILE A 158     258.914 -48.326 100.849  1.00 60.25      A    C
ATOM    263  C   ILE A 158     258.354 -52.530  98.176  1.00 52.33      A    C
ATOM    264  O   ILE A 158     257.269 -52.732  97.635  1.00 50.55      A    O
ATOM    265  N   LEU A 159     259.034 -53.472  98.823  1.00 52.37      A    N
ATOM    266  CA  LEU A 159     258.631 -54.858  98.835  1.00 48.01      A    C
ATOM    267  CB  LEU A 159     259.322 -55.530  97.663  1.00 49.17      A    C
ATOM    268  CG  LEU A 159     260.759 -55.019  97.480  1.00 47.74      A    C
ATOM    269  CD1 LEU A 159     261.690 -55.880  98.307  1.00 46.92      A    C
ATOM    270  CD2 LEU A 159     261.150 -55.055  96.008  1.00 47.94      A    C
ATOM    271  C   LEU A 159     259.089 -55.468 100.111  1.00 44.03      A    C
ATOM    272  O   LEU A 159     259.595 -54.777 100.931  1.00 48.23      A    O
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ATOM    273  N   ALA A 160     258.889 -56.765 100.280  1.00 43.85      A    N
ATOM    274  CA  ALA A 160     259.347 -57.465 101.474  1.00 37.28      A    C
ATOM    275  CB  ALA A 160     258.187 -58.117 102.184  1.00 41.03      A    C
ATOM    276  C   ALA A 160     260.346 -58.531 101.030  1.00 43.40      A    C
ATOM    277  O   ALA A 160     260.084 -59.301 100.096  1.00 40.92      A    O
ATOM    278  N   LEU A 161     261.494 -58.566 101.693  1.00 46.08      A    N
ATOM    279  CA  LEU A 161     262.564 -59.520 101.378  1.00 44.64      A    C
ATOM    280  CB  LEU A 161     263.916 -58.794 101.334  1.00 47.23      A    C
ATOM    281  CG  LEU A 161     264.865 -59.050 100.188  1.00 47.49      A    C
ATOM    282  CD1 LEU A 161     264.153 -58.846  98.870  1.00 42.04      A    C
ATOM    283  CD2 LEU A 161     266.031 -58.125 100.309  1.00 46.85      A    C
ATOM    284  C   LEU A 161     262.607 -60.592 102.441  1.00 45.60      A    C
ATOM    285  O   LEU A 161     263.013 -60.338 103.570  1.00 56.35      A    O
ATOM    286  N   LYS A 162     262.194 -61.801 102.078  1.00 46.81      A    N
ATOM    287  CA  LYS A 162     262.178 -62.940 103.009  1.00 41.78      A    C
ATOM    288  CB  LYS A 162     261.104 -63.922 102.585  1.00 37.22      A    C
ATOM    289  CG  LYS A 162     260.826 -65.007 103.588  1.00 34.96      A    C
ATOM    290  CD  LYS A 162     259.600 -65.804 103.219  1.00 30.75      A    C
ATOM    291  CE  LYS A 162     259.522 -67.056 104.081  1.00 32.45      A    C
ATOM    292  NZ  LYS A 162     258.194 -67.801 103.796  1.00 32.97      A    N
ATOM    293  C   LYS A 162     263.521 -63.634 103.018  1.00 43.17      A    C
ATOM    294  O   LYS A 162     263.869 -64.350 102.087  1.00 50.65      A    O
ATOM    295  N   VAL A 163     264.299 -63.369 104.049  1.00 47.41      A    N
ATOM    296  CA  VAL A 163     265.625 -63.965 104.187  1.00 50.56      A    C
ATOM    297  CB  VAL A 163     266.539 -63.091 105.120  1.00 49.49      A    C
ATOM    298  CG1 VAL A 163     267.951 -63.664 105.180  1.00 43.15      A    C
ATOM    299  CG2 VAL A 163     266.555 -61.660 104.586  1.00 46.95      A    C
ATOM    300  C   VAL A 163     265.570 -65.371 104.756  1.00 48.41      A    C
ATOM    301  O   VAL A 163     264.994 -65.586 105.798  1.00 53.08      A    O
ATOM    302  N   LEU A 164     266.195 -66.329 104.085  1.00 53.99      A    N
ATOM    303  CA  LEU A 164     266.261 -67.732 104.569  1.00 55.36      A    C
ATOM    304  CB  LEU A 164     265.516 -68.657 103.598  1.00 54.99      A    C
ATOM    305  CG  LEU A 164     264.173 -68.154 103.039  1.00 57.06      A    C
ATOM    306  CD1 LEU A 164     264.096 -68.423 101.535  1.00 57.49      A    C
ATOM    307  CD2 LEU A 164     263.093 -68.851 103.764  1.00 55.47      A    C
ATOM    308  C   LEU A 164     267.715 -68.188 104.665  1.00 52.23      A    C
ATOM    309  O   LEU A 164     268.488 -67.990 103.745  1.00 50.98      A    O
ATOM    310  N   PHE A 165     268.081 -68.800 105.774  1.00 52.15      A    N
ATOM    311  CA  PHE A 165     269.422 -69.297 105.892  1.00 51.87      A    C
ATOM    312  CB  PHE A 165     269.859 -69.322 107.352  1.00 54.79      A    C
ATOM    313  CG  PHE A 165     270.210 -67.979 107.875  1.00 59.43      A    C
ATOM    314  CD1 PHE A 165     269.232 -67.171 108.426  1.00 61.03      A    C
ATOM    315  CD2 PHE A 165     271.517 -67.493 107.769  1.00 59.15      A    C
ATOM    316  CE1 PHE A 165     269.542 -65.896 108.856  1.00 59.31      A    C
ATOM    317  CE2 PHE A 165     271.835 -66.216 108.196  1.00 59.42      A    C
ATOM    318  CZ  PHE A 165     270.845 -65.412 108.745  1.00 60.41      A    C
ATOM    319  C   PHE A 165     269.598 -70.683 105.287  1.00 52.40      A    C
ATOM    320  O   PHE A 165     268.924 -71.654 105.675  1.00 45.64      A    O
ATOM    321  N   LYS A 166     270.504 -70.772 104.320  1.00 52.32      A    N
ATOM    322  CA  LYS A 166     270.786 -72.050 103.696  1.00 53.94      A    C
ATOM    323  CB  LYS A 166     271.911 -71.916 102.708  1.00 47.98      A    C
ATOM    324  CG  LYS A 166     271.540 -71.081 101.498  1.00 41.92      A    C
ATOM    325  CD  LYS A 166     272.530 -71.309 100.383  1.00 38.85      A    C
ATOM    326  CE  LYS A 166     272.490 -70.201  99.345  1.00 31.90      A    C
ATOM    327  NZ  LYS A 166     273.477 -70.401  98.252  1.00 43.47      A    N
ATOM    328  C   LYS A 166     271.159 -73.067 104.740  1.00 51.94      A    C
ATOM    329  O   LYS A 166     270.625 -74.147 104.743  1.00 62.20      A    O
ATOM    330  N   ALA A 167     272.031 -72.699 105.659  1.00 51.64      A    N
ATOM    331  CA  ALA A 167     272.445 -73.632 106.682  1.00 51.81      A    C
ATOM    332  CB  ALA A 167     273.293 -72.935 107.670  1.00 53.31      A    C
ATOM    333  C   ALA A 167     271.234 -74.240 107.369  1.00 53.85      A    C
ATOM    334  O   ALA A 167     271.105 -75.457 107.454  1.00 57.18      A    O
ATOM    335  N   GLN A 168     270.318 -73.403 107.833  1.00 59.28      A    N
ATOM    336  CA  GLN A 168     269.139 -73.902 108.534  1.00 59.95      A    C
ATOM    337  CB  GLN A 168     268.348 -72.736 109.131  1.00 66.12      A    C
ATOM    338  CG  GLN A 168     268.398 -72.648 110.644  1.00 72.61      A    C
ATOM    339  CD  GLN A 168     267.038 -72.270 111.248  1.00 77.64      A    C
ATOM    340  OE1 GLN A 168     266.542 -72.938 112.173  1.00 76.82      A    O
ATOM    341  NE2 GLN A 168     266.432 -71.196 110.727  1.00 72.17      A    N
ATOM    342  C   GLN A 168     268.221 -74.718 107.635  1.00 55.73      A    C
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ATOM    343  O   GLN A 168     267.646 -75.736 108.043  1.00 53.22      A    O
ATOM    344  N   LEU A 169     268.076 -74.262 106.404  1.00 47.44      A    N
ATOM    345  CA  LEU A 169     267.214 -74.954 105.430  1.00 53.18      A    C
ATOM    346  CB  LEU A 169     267.236 -74.247 104.084  1.00 46.05      A    C
ATOM    347  CG  LEU A 169     266.495 -72.939 104.055  1.00 47.35      A    C
ATOM    348  CD1 LEU A 169     266.858 -72.184 102.803  1.00 45.64      A    C
ATOM    349  CD2 LEU A 169     265.005 -73.224 104.130  1.00 44.94      A    C
ATOM    350  C   LEU A 169     267.743 -76.381 105.180  1.00 53.79      A    C
ATOM    351  O   LEU A 169     266.983 -77.361 105.065  1.00 54.87      A    O
ATOM    352  N   GLU A 170     269.057 -76.488 105.056  1.00 54.40      A    N
ATOM    353  CA  GLU A 170     269.692 -77.771 104.839  1.00 58.30      A    C
ATOM    354  CB  GLU A 170     271.162 -77.587 104.678  1.00 57.36      A    C
ATOM    355  CG  GLU A 170     271.585 -77.158 103.319  1.00 66.04      A    C
ATOM    356  CD  GLU A 170     273.099 -76.836 103.260  1.00 73.19      A    C
ATOM    357  OE1 GLU A 170     273.912 -77.755 103.560  1.00 76.86      A    O
ATOM    358  OE2 GLU A 170     273.473 -75.670 102.918  1.00 77.40      A    O
ATOM    359  C   GLU A 170     269.481 -78.643 106.045  1.00 60.58      A    C
ATOM    360  O   GLU A 170     268.882 -79.730 105.913  1.00 71.27      A    O
ATOM    361  N   LYS A 171     269.931 -78.162 107.207  1.00 59.38      A    N
ATOM    362  CA  LYS A 171     269.817 -78.942 108.423  1.00 59.74      A    C
ATOM    363  CB  LYS A 171     270.264 -78.118 109.600  1.00 58.50      A    C
ATOM    364  C   LYS A 171     268.409 -79.500 108.655  1.00 62.87      A    C
ATOM    365  O   LYS A 171     268.227 -80.438 109.441  1.00 65.46      A    O
ATOM    366  N   ALA A 172     267.417 -78.939 107.970  1.00 58.04      A    N
ATOM    367  CA  ALA A 172     266.044 -79.373 108.153  1.00 55.58      A    C
ATOM    368  CB  ALA A 172     265.139 -78.157 108.445  1.00 44.25      A    C
ATOM    369  C   ALA A 172     265.506 -80.129 106.962  1.00 57.83      A    C
ATOM    370  O   ALA A 172     264.406 -80.699 107.038  1.00 63.97      A    O
ATOM    371  N   GLY A 173     266.255 -80.108 105.860  1.00 59.05      A    N
ATOM    372  CA  GLY A 173     265.825 -80.806 104.659  1.00 58.57      A    C
ATOM    373  C   GLY A 173     264.519 -80.290 104.096  1.00 56.33      A    C
ATOM    374  O   GLY A 173     263.636 -81.045 103.722  1.00 57.22      A    O
ATOM    375  N   VAL A 174     264.392 -78.983 104.043  1.00 52.27      A    N
ATOM    376  CA  VAL A 174     263.183 -78.389 103.520  1.00 51.67      A    C
ATOM    377  CB  VAL A 174     262.555 -77.420 104.523  1.00 44.57      A    C
ATOM    378  CG1 VAL A 174     262.061 -78.172 105.687  1.00 45.83      A    C
ATOM    379  CG2 VAL A 174     263.557 -76.374 104.919  1.00 43.22      A    C
ATOM    380  C   VAL A 174     263.518 -77.628 102.230  1.00 55.27      A    C
ATOM    381  O   VAL A 174     262.825 -76.679 101.851  1.00 62.81      A    O
ATOM    382  N   GLU A 175     264.577 -78.044 101.548  1.00 50.98      A    N
ATOM    383  CA  GLU A 175     264.955 -77.393 100.296  1.00 52.00      A    C
ATOM    384  CB  GLU A 175     266.251 -77.994  99.721  1.00 47.79      A    C
ATOM    385  CG  GLU A 175     267.462 -77.861 100.680  1.00 59.64      A    C
ATOM    386  CD  GLU A 175     267.730 -79.101 101.479  1.00 59.83      A    C
ATOM    387  OE1 GLU A 175     266.822 -79.948 101.619  1.00 66.12      A    O
ATOM    388  OE2 GLU A 175     268.853 -79.219 101.990  1.00 70.43      A    O
ATOM    389  C   GLU A 175     263.852 -77.526  99.266  1.00 51.17      A    C
ATOM    390  O   GLU A 175     263.637 -76.642  98.463  1.00 57.75      A    O
ATOM    391  N   HIS A 176     263.166 -78.661  99.266  1.00 60.20      A    N
ATOM    392  CA  HIS A 176     262.080 -78.920  98.312  1.00 61.34      A    C
ATOM    393  CB  HIS A 176     261.735 -80.414  98.276  1.00 62.47      A    C
ATOM    394  CG  HIS A 176     261.265 -80.959  99.579  1.00 70.92      A    C
ATOM    395  CD2 HIS A 176     261.875 -81.020 100.783  1.00 68.70      A    C
ATOM    396  ND1 HIS A 176     260.020 -81.533  99.740  1.00 72.07      A    N
ATOM    397  CE1 HIS A 176     259.886 -81.925 100.994  1.00 75.43      A    C
ATOM    398  NE2 HIS A 176     260.996 -81.625 101.644  1.00 77.22      A    N
ATOM    399  C   HIS A 176     260.828 -78.116  98.620  1.00 60.76      A    C
ATOM    400  O   HIS A 176     260.058 -77.805  97.733  1.00 64.86      A    O
ATOM    401  N   GLN A 177     260.607 -77.784  99.886  1.00 63.60      A    N
ATOM    402  CA  GLN A 177     259.436 -76.993 100.239  1.00 59.32      A    C
ATOM    403  CB  GLN A 177     259.188 -77.080 101.756  1.00 65.79      A    C
ATOM    404  CG  GLN A 177     258.573 -78.484 102.090  1.00 78.25      A    C
ATOM    405  CD  GLN A 177     258.481 -78.896 103.539  1.00 84.93      A    C
ATOM    406  OE1 GLN A 177     257.670 -79.822 103.897  1.00 89.62      A    O
ATOM    407  NE2 GLN A 177     259.316 -78.274 104.407  1.00 87.76      A    N
ATOM    408  C   GLN A 177     259.647 -75.552  99.730  1.00 54.25      A    C
ATOM    409  O   GLN A 177     258.739 -75.013  99.073  1.00 51.39      A    O
ATOM    410  N   LEU A 178     260.844 -74.972  99.942  1.00 45.84      A    N
ATOM    411  CA  LEU A 178     261.123 -73.611  99.474  1.00 49.49      A    C
ATOM    412  CB  LEU A 178     262.514 -73.175  99.900  1.00 42.21      A    C
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ATOM    413  CG  LEU A 178     263.032 -71.858  99.325  1.00 49.26      A    C
ATOM    414  CD1 LEU A 178     261.981 -70.693  99.584  1.00 37.20      A    C
ATOM    415  CD2 LEU A 178     264.421 -71.557  99.950  1.00 46.43      A    C
ATOM    416  C   LEU A 178     261.030 -73.631  97.939  1.00 46.87      A    C
ATOM    417  O   LEU A 178     260.678 -72.659  97.280  1.00 52.87      A    O
ATOM    418  N   ARG A 179     261.314 -74.778  97.360  1.00 52.38      A    N
ATOM    419  CA  ARG A 179     261.258 -74.887  95.908  1.00 48.78      A    C
ATOM    420  CB  ARG A 179     261.877 -76.207  95.443  1.00 55.74      A    C
ATOM    421  CG  ARG A 179     262.661 -76.085  94.149  1.00 55.19      A    C
ATOM    422  CD  ARG A 179     263.898 -77.002  94.178  1.00 71.41      A    C
ATOM    423  NE  ARG A 179     264.829 -76.685  93.086  1.00 73.48      A    N
ATOM    424  CZ  ARG A 179     264.827 -77.258  91.873  1.00 77.16      A    C
ATOM    425  NH1 ARG A 179     263.941 -78.208  91.565  1.00 70.26      A    N
ATOM    426  NH2 ARG A 179     265.709 -76.874  90.951  1.00 75.62      A    N
ATOM    427  C   ARG A 179     259.841 -74.758  95.383  1.00 46.80      A    C
ATOM    428  O   ARG A 179     259.605 -74.009  94.443  1.00 37.96      A    O
ATOM    429  N   ARG A 180     258.912 -75.494  95.988  1.00 41.56      A    N
ATOM    430  CA  ARG A 180     257.504 -75.451  95.630  1.00 46.45      A    C
ATOM    431  CB  ARG A 180     256.749 -76.543  96.386  1.00 47.01      A    C
ATOM    432  CG  ARG A 180     256.416 -77.762  95.546  1.00 51.52      A    C
ATOM    433  CD  ARG A 180     255.582 -78.783  96.257  1.00 53.97      A    C
ATOM    434  NE  ARG A 180     256.374 -79.863  96.824  1.00 69.57      A    N
ATOM    435  CZ  ARG A 180     256.902 -79.849  98.046  1.00 76.20      A    C
ATOM    436  NH1 ARG A 180     256.721 -78.796  98.846  1.00 85.82      A    N
ATOM    437  NH2 ARG A 180     257.614 -80.893  98.475  1.00 82.98      A    N
ATOM    438  C   ARG A 180     256.882 -74.100  95.969  1.00 48.19      A    C
ATOM    439  O   ARG A 180     256.088 -73.556  95.189  1.00 55.26      A    O
ATOM    440  N   GLU A 181     257.235 -73.560  97.130  1.00 49.77      A    N
ATOM    441  CA  GLU A 181     256.694 -72.279  97.536  1.00 48.24      A    C
ATOM    442  CB  GLU A 181     257.367 -71.820  98.841  1.00 51.28      A    C
ATOM    443  CG  GLU A 181     256.969 -70.425  99.303  1.00 55.39      A    C
ATOM    444  CD  GLU A 181     257.553 -70.042 100.652  1.00 57.20      A    C
ATOM    445  OE1 GLU A 181     258.173 -70.904 101.305  1.00 46.80      A    O
ATOM    446  OE2 GLU A 181     257.362 -68.871 101.058  1.00 56.40      A    O
ATOM    447  C   GLU A 181     256.958 -71.259  96.430  1.00 49.63      A    C
ATOM    448  O   GLU A 181     256.044 -70.571  95.930  1.00 44.79      A    O
ATOM    449  N   VAL A 182     258.227 -71.191  96.037  1.00 46.11      A    N
ATOM    450  CA  VAL A 182     258.659 -70.228  95.035  1.00 45.55      A    C
ATOM    451  CB  VAL A 182     260.183 -70.266  94.833  1.00 40.91      A    C
ATOM    452  CG1 VAL A 182     260.560 -69.403  93.678  1.00 38.12      A    C
ATOM    453  CG2 VAL A 182     260.875 -69.730  96.059  1.00 51.08      A    C
ATOM    454  C   VAL A 182     257.954 -70.443  93.695  1.00 46.82      A    C
ATOM    455  O   VAL A 182     257.459 -69.483  93.056  1.00 40.29      A    O
ATOM    456  N   GLU A 183     257.936 -71.690  93.237  1.00 48.08      A    N
ATOM    457  CA  GLU A 183     257.280 -72.012  91.968  1.00 52.62      A    C
ATOM    458  CB  GLU A 183     257.493 -73.478  91.608  1.00 56.60      A    C
ATOM    459  CG  GLU A 183     258.695 -73.784  90.808  1.00 70.69      A    C
ATOM    460  CD  GLU A 183     258.923 -75.283  90.746  1.00 77.34      A    C
ATOM    461  OE1 GLU A 183     257.954 -76.011  90.397  1.00 83.76      A    O
ATOM    462  OE2 GLU A 183     260.068 -75.727  91.052  1.00 82.45      A    O
ATOM    463  C   GLU A 183     255.800 -71.754  91.912  1.00 49.85      A    C
ATOM    464  O   GLU A 183     255.313 -71.138  90.947  1.00 46.36      A    O
ATOM    465  N   ILE A 184     255.098 -72.317  92.898  1.00 46.74      A    N
ATOM    466  CA  ILE A 184     253.660 -72.157  92.965  1.00 43.86      A    C
ATOM    467  CB  ILE A 184     253.067 -72.962  94.115  1.00 40.26      A    C
ATOM    468  CG2 ILE A 184     251.553 -72.714  94.209  1.00 29.84      A    C
ATOM    469  CG1 ILE A 184     253.313 -74.446  93.860  1.00 36.80      A    C
ATOM    470  CD1 ILE A 184     252.748 -75.369  94.961  1.00 40.80      A    C
ATOM    471  C   ILE A 184     253.221 -70.713  93.099  1.00 46.29      A    C
ATOM    472  O   ILE A 184     252.448 -70.199  92.284  1.00 49.47      A    O
ATOM    473  N   GLN A 185     253.720 -70.054  94.132  1.00 49.28      A    N
ATOM    474  CA  GLN A 185     253.328 -68.666  94.388  1.00 52.47      A    C
ATOM    475  CB  GLN A 185     253.948 -68.189  95.721  1.00 44.73      A    C
ATOM    476  CG  GLN A 185     253.150 -67.168  96.526  1.00 48.30      A    C
ATOM    477  CD  GLN A 185     253.861 -66.745  97.745  1.00 54.47      A    C
ATOM    478  OE1 GLN A 185     254.700 -67.516  98.331  1.00 61.67      A    O
ATOM    479  NE2 GLN A 185     253.553 -65.501  98.201  1.00 56.50      A    N
ATOM    480  C   GLN A 185     253.707 -67.716  93.231  1.00 50.63      A    C
ATOM    481  O   GLN A 185     252.971 -66.780  92.894  1.00 52.61      A    O
ATOM    482  N   SER A 186     254.843 -67.972  92.610  1.00 47.27      A    N
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ATOM    483  CA  SER A 186     255.315 -67.114  91.541  1.00 52.03      A    C
ATOM    484  CB  SER A 186     256.692 -67.586  91.048  1.00 51.09      A    C
ATOM    485  OG  SER A 186     256.609 -68.877  90.496  1.00 54.11      A    O
ATOM    486  C   SER A 186     254.346 -67.050  90.373  1.00 51.30      A    C
ATOM    487  O   SER A 186     254.116 -65.999  89.812  1.00 53.71      A    O
ATOM    488  N   HIS A 187     253.774 -68.184  90.001  1.00 55.86      A    N
ATOM    489  CA  HIS A 187     252.846 -68.233  88.883  1.00 57.28      A    C
ATOM    490  CB  HIS A 187     252.945 -69.605  88.190  1.00 68.44      A    C
ATOM    491  CG  HIS A 187     254.283 -69.866  87.541  1.00 77.26      A    C
ATOM    492  CD2 HIS A 187     255.147 -69.041  86.892  1.00 78.77      A    C
ATOM    493  ND1 HIS A 187     254.874 -71.114  87.532  1.00 80.45      A    N
ATOM    494  CE1 HIS A 187     256.041 -71.048  86.911  1.00 81.91      A    C
ATOM    495  NE2 HIS A 187     256.232 -69.802  86.512  1.00 81.51      A    N
ATOM    496  C   HIS A 187     251.418 -67.953  89.300  1.00 57.51      A    C
ATOM    497  O   HIS A 187     250.496 -68.154  88.529  1.00 60.26      A    O
ATOM    498  N   LEU A 188     251.230 -67.497  90.530  1.00 59.97      A    N
ATOM    499  CA  LEU A 188     249.900 -67.189  91.028  1.00 56.67      A    C
ATOM    500  CB  LEU A 188     249.832 -67.488  92.511  1.00 57.07      A    C
ATOM    501  CG  LEU A 188     248.970 -68.663  92.952  1.00 55.73      A    C
ATOM    502  CD1 LEU A 188     249.478 -69.896  92.257  1.00 62.61      A    C
ATOM    503  CD2 LEU A 188     249.027 -68.827  94.465  1.00 53.98      A    C
ATOM    504  C   LEU A 188     249.598 -65.728  90.777  1.00 57.85      A    C
ATOM    505  O   LEU A 188     250.503 -64.881  90.799  1.00 64.49      A    O
ATOM    506  N   ARG A 189     248.331 -65.440  90.507  1.00 59.25      A    N
ATOM    507  CA  ARG A 189     247.893 -64.067  90.239  1.00 63.66      A    C
ATOM    508  CB  ARG A 189     247.927 -63.796  88.734  1.00 64.78      A    C
ATOM    509  CG  ARG A 189     249.318 -63.660  88.125  1.00 70.33      A    C
ATOM    510  CD  ARG A 189     249.903 -62.285  88.356  1.00 72.14      A    C
ATOM    511  NE  ARG A 189     250.864 -61.937  87.301  1.00 81.14      A    N
ATOM    512  CZ  ARG A 189     250.716 -60.923  86.432  1.00 82.52      A    C
ATOM    513  NH1 ARG A 189     249.636 -60.138  86.478  1.00 79.99      A    N
ATOM    514  NH2 ARG A 189     251.658 -60.669  85.521  1.00 82.64      A    N
ATOM    515  C   ARG A 189     246.469 -63.844  90.761  1.00 59.43      A    C
ATOM    516  O   ARG A 189     245.497 -64.167  90.072  1.00 61.20      A    O
ATOM    517  N   HIS A 190     246.342 -63.283  91.964  1.00 56.49      A    N
ATOM    518  CA  HIS A 190     245.023 -63.075  92.565  1.00 48.34      A    C
ATOM    519  CB  HIS A 190     244.506 -64.377  93.201  1.00 52.70      A    C
ATOM    520  CG  HIS A 190     243.036 -64.372  93.489  1.00 49.06      A    C
ATOM    521  CD2 HIS A 190     242.038 -65.207  93.107  1.00 52.53      A    C
ATOM    522  ND1 HIS A 190     242.449 -63.432  94.302  1.00 51.06      A    N
ATOM    523  CE1 HIS A 190     241.155 -63.686  94.414  1.00 46.17      A    C
ATOM    524  NE2 HIS A 190     240.878 -64.757  93.697  1.00 43.53      A    N
ATOM    525  C   HIS A 190     245.116 -61.998  93.611  1.00 47.54      A    C
ATOM    526  O   HIS A 190     246.077 -61.946  94.377  1.00 44.41      A    O
ATOM    527  N   PRO A 191     244.119 -61.102  93.645  1.00 49.93      A    N
ATOM    528  CD  PRO A 191     242.947 -61.054  92.749  1.00 46.91      A    C
ATOM    529  CA  PRO A 191     244.070 -59.992  94.607  1.00 49.33      A    C
ATOM    530  CB  PRO A 191     242.694 -59.384  94.346  1.00 50.21      A    C
ATOM    531  CG  PRO A 191     242.518 -59.644  92.887  1.00 48.82      A    C
ATOM    532  C   PRO A 191     244.239 -60.419  96.072  1.00 46.55      A    C
ATOM    533  O   PRO A 191     244.892 -59.719  96.848  1.00 42.94      A    O
ATOM    534  N   ASN A 192     243.647 -61.555  96.434  1.00 42.75      A    N
ATOM    535  CA  ASN A 192     243.715 -62.060  97.791  1.00 48.46      A    C
ATOM    536  CB  ASN A 192     242.378 -62.678  98.192  1.00 45.61      A    C
ATOM    537  CG  ASN A 192     241.206 -61.781  97.847  1.00 48.26      A    C
ATOM    538  OD1 ASN A 192     240.715 -61.767  96.724  1.00 55.77      A    O
ATOM    539  ND2 ASN A 192     240.766 -61.020  98.804  1.00 48.89      A    N
ATOM    540  C   ASN A 192     244.831 -63.085  97.953  1.00 44.35      A    C
ATOM    541  O   ASN A 192     244.725 -64.017  98.747  1.00 54.33      A    O
ATOM    542  N   ILE A 193     245.909 -62.901  97.204  1.00 42.87      A    N
ATOM    543  CA  ILE A 193     247.067 -63.781  97.277  1.00 40.40      A    C
ATOM    544  CB  ILE A 193     247.054 -64.847  96.138  1.00 40.53      A    C
ATOM    545  CG2 ILE A 193     248.292 -65.733  96.243  1.00 22.41      A    C
ATOM    546  CG1 ILE A 193     245.800 -65.732  96.274  1.00 36.30      A    C
ATOM    547  CD1 ILE A 193     245.709 -66.793  95.246  1.00 46.23      A    C
ATOM    548  C   ILE A 193     248.330 -62.944  97.180  1.00 43.53      A    C
ATOM    549  O   ILE A 193     248.481 -62.176  96.228  1.00 41.20      A    O
ATOM    550  N   LEU A 194     249.217 -63.070  98.171  1.00 46.32      A    N
ATOM    551  CA  LEU A 194     250.449 -62.307  98.168  1.00 48.93      A    C
ATOM    552  CB  LEU A 194     251.233 -62.511  99.477  1.00 44.51      A    C
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ATOM    553  CG  LEU A 194     252.485 -61.630  99.579  1.00 41.08      A    C
ATOM    554  CD1 LEU A 194     252.055 -60.195  99.956  1.00 43.64      A    C
ATOM    555  CD2 LEU A 194     253.437 -62.183 100.655  1.00 41.05      A    C
ATOM    556  C   LEU A 194     251.290 -62.773  96.988  1.00 49.00      A    C
ATOM    557  O   LEU A 194     251.553 -63.975  96.826  1.00 53.77      A    O
ATOM    558  N   ARG A 195     251.712 -61.823  96.162  1.00 43.08      A    N
ATOM    559  CA  ARG A 195     252.553 -62.166  95.023  1.00 45.19      A    C
ATOM    560  CB  ARG A 195     252.509 -61.043  93.969  1.00 43.15      A    C
ATOM    561  CG  ARG A 195     251.180 -60.913  93.213  1.00 46.56      A    C
ATOM    562  CD  ARG A 195     251.400 -60.798  91.730  1.00 59.57      A    C
ATOM    563  NE  ARG A 195     252.816 -60.787  91.377  1.00 72.51      A    N
ATOM    564  CZ  ARG A 195     253.288 -60.716  90.133  1.00 78.66      A    C
ATOM    565  NH1 ARG A 195     252.446 -60.646  89.119  1.00 80.03      A    N
ATOM    566  NH2 ARG A 195     254.603 -60.723  89.898  1.00 82.29      A    N
ATOM    567  C   ARG A 195     254.004 -62.450  95.390  1.00 44.60      A    C
ATOM    568  O   ARG A 195     254.470 -62.001  96.429  1.00 47.11      A    O
ATOM    569  N   LEU A 196     254.710 -63.177  94.522  1.00 48.18      A    N
ATOM    570  CA  LEU A 196     256.116 -63.465  94.735  1.00 48.30      A    C
ATOM    571  CB  LEU A 196     256.345 -64.954  95.048  1.00 50.39      A    C
ATOM    572  CG  LEU A 196     257.768 -65.343  95.383  1.00 41.45      A    C
ATOM    573  CD1 LEU A 196     258.090 -64.804  96.698  1.00 58.09      A    C
ATOM    574  CD2 LEU A 196     257.886 -66.788  95.411  1.00 44.21      A    C
ATOM    575  C   LEU A 196     256.799 -63.091  93.432  1.00 50.04      A    C
ATOM    576  O   LEU A 196     256.887 -63.926  92.532  1.00 56.48      A    O
ATOM    577  N   TYR A 197     257.301 -61.854  93.359  1.00 52.17      A    N
ATOM    578  CA  TYR A 197     257.970 -61.330  92.172  1.00 49.64      A    C
ATOM    579  CB  TYR A 197     258.419 -59.908  92.460  1.00 44.72      A    C
ATOM    580  CG  TYR A 197     257.289 -59.034  92.959  1.00 43.03      A    C
ATOM    581  CD1 TYR A 197     257.445 -58.246  94.117  1.00 44.46      A    C
ATOM    582  CE1 TYR A 197     256.439 -57.433  94.583  1.00 51.15      A    C
ATOM    583  CD2 TYR A 197     256.085 -58.978  92.278  1.00 41.30      A    C
ATOM    584  CE2 TYR A 197     255.057 -58.161  92.730  1.00 50.46      A    C
ATOM    585  CZ  TYR A 197     255.243 -57.390  93.887  1.00 52.65      A    C
ATOM    586  OH  TYR A 197     254.234 -56.573  94.338  1.00 63.16      A    O
ATOM    587  C   TYR A 197     259.142 -62.186  91.684  1.00 51.16      A    C
ATOM    588  O   TYR A 197     259.129 -62.683  90.572  1.00 58.21      A    O
ATOM    589  N   GLY A 198     260.141 -62.378  92.529  1.00 53.24      A    N
ATOM    590  CA  GLY A 198     261.296 -63.164  92.148  1.00 47.33      A    C
ATOM    591  C   GLY A 198     262.028 -63.697  93.360  1.00 48.93      A    C
ATOM    592  O   GLY A 198     261.447 -63.928  94.412  1.00 49.80      A    O
ATOM    593  N   TYR A 199     263.316 -63.941  93.204  1.00 48.77      A    N
ATOM    594  CA  TYR A 199     264.134 -64.436  94.315  1.00 50.98      A    C
ATOM    595  CB  TYR A 199     263.712 -65.834  94.699  1.00 54.11      A    C
ATOM    596  CG  TYR A 199     264.323 -66.921  93.853  1.00 56.57      A    C
ATOM    597  CD1 TYR A 199     265.506 -67.521  94.238  1.00 57.21      A    C
ATOM    598  CE1 TYR A 199     266.088 -68.526  93.471  1.00 58.18      A    C
ATOM    599  CD2 TYR A 199     263.715 -67.351  92.664  1.00 59.67      A    C
ATOM    600  CE2 TYR A 199     264.286 -68.349  91.899  1.00 59.17      A    C
ATOM    601  CZ  TYR A 199     265.479 -68.933  92.308  1.00 59.36      A    C
ATOM    602  OH  TYR A 199     266.075 -69.917  91.535  1.00 63.54      A    O
ATOM    603  C   TYR A 199     265.563 -64.463  93.826  1.00 48.41      A    C
ATOM    604  O   TYR A 199     265.787 -64.357  92.640  1.00 47.41      A    O
ATOM    605  N   PHE A 200     266.542 -64.591  94.701  1.00 43.25      A    N
ATOM    606  CA  PHE A 200     267.921 -64.582  94.221  1.00 40.67      A    C
ATOM    607  CB  PHE A 200     268.427 -63.159  93.950  1.00 43.34      A    C
ATOM    608  CG  PHE A 200     268.272 -62.218  95.134  1.00 48.79      A    C
ATOM    609  CD1 PHE A 200     269.249 -62.115  96.166  1.00 50.06      A    C
ATOM    610  CD2 PHE A 200     267.178 -61.322  95.162  1.00 52.88      A    C
ATOM    611  CE1 PHE A 200     269.107 -61.097  97.192  1.00 53.41      A    C
ATOM    612  CE2 PHE A 200     267.048 -60.331  96.166  1.00 49.85      A    C
ATOM    613  CZ  PHE A 200     267.993 -60.201  97.160  1.00 49.27      A    C
ATOM    614  C   PHE A 200     268.645 -65.113  95.325  1.00 47.09      A    C
ATOM    615  O   PHE A 200     268.037 -65.599  96.262  1.00 47.13      A    O
ATOM    616  N   HIS A 201     269.953 -65.125  95.219  1.00 56.46      A    N
ATOM    617  CA  HIS A 201     270.635 -65.604  96.382  1.00 56.94      A    C
ATOM    618  CB  HIS A 201     270.242 -67.052  96.679  1.00 62.89      A    C
ATOM    619  CG  HIS A 201     270.668 -68.030  95.648  1.00 66.27      A    C
ATOM    620  CD2 HIS A 201     270.131 -68.454  94.469  1.00 68.86      A    C
ATOM    621  ND1 HIS A 201     271.876 -68.658  95.778  1.00 70.42      A    N
ATOM    622  CE1 HIS A 201     272.086 -69.425  94.727  1.00 63.77      A    C
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ATOM    623  NE2 HIS A 201     271.048 -69.319  93.917  1.00 69.53      A    N
ATOM    624  C   HIS A 201     272.082 -65.339  96.531  1.00 59.01      A    C
ATOM    625  O   HIS A 201     272.657 -64.604  95.737  1.00 56.46      A    O
ATOM    626  N   ASP A 202     272.636 -65.783  97.652  1.00 53.50      A    N
ATOM    627  CA  ASP A 202     274.052 -65.546  97.850  1.00 58.12      A    C
ATOM    628  CB  ASP A 202     274.321 -64.225  98.617  1.00 61.13      A    C
ATOM    629  CG  ASP A 202     273.888 -64.255 100.090  1.00 65.37      A    C
ATOM    630  OD1 ASP A 202     273.969 -65.308 100.803  1.00 69.09      A    O
ATOM    631  OD2 ASP A 202     273.489 -63.181 100.569  1.00 73.25      A    O
ATOM    632  C   ASP A 202     274.782 -66.745  98.522  1.00 59.73      A    C
ATOM    633  O   ASP A 202     274.357 -67.899  98.426  1.00 61.93      A    O
ATOM    634  N   ALA A 203     275.910 -66.473  99.163  1.00 59.60      A    N
ATOM    635  CA  ALA A 203     276.705 -67.507  99.793  1.00 59.87      A    C
ATOM    636  CB  ALA A 203     278.079 -66.933 100.191  1.00 57.31      A    C
ATOM    637  C   ALA A 203     276.068 -68.138 100.990  1.00 60.08      A    C
ATOM    638  O   ALA A 203     276.287 -69.294 101.229  1.00 62.79      A    O
ATOM    639  N   THR A 204     275.291 -67.377 101.748  1.00 60.13      A    N
ATOM    640  CA  THR A 204     274.700 -67.893 102.968  1.00 58.14      A    C
ATOM    641  CB  THR A 204     275.067 -67.010 104.168  1.00 54.92      A    C
ATOM    642  OG1 THR A 204     275.068 -65.622 103.799  1.00 51.82      A    O
ATOM    643  CG2 THR A 204     276.406 -67.388 104.681  1.00 55.25      A    C
ATOM    644  C   THR A 204     273.203 -68.070 102.993  1.00 61.74      A    C
ATOM    645  O   THR A 204     272.662 -69.063 103.547  1.00 66.23      A    O
ATOM    646  N   ARG A 205     272.517 -67.099 102.434  1.00 58.56      A    N
ATOM    647  CA  ARG A 205     271.091 -67.217 102.444  1.00 58.96      A    C
ATOM    648  CB  ARG A 205     270.505 -66.287 103.493  1.00 56.07      A    C
ATOM    649  CG  ARG A 205     270.986 -64.877 103.382  1.00 59.74      A    C
ATOM    650  CD  ARG A 205     271.764 -64.493 104.616  1.00 62.84      A    C
ATOM    651  NE  ARG A 205     272.739 -63.462 104.285  1.00 73.59      A    N
ATOM    652  CZ  ARG A 205     273.407 -62.747 105.185  1.00 79.55      A    C
ATOM    653  NH1 ARG A 205     273.198 -62.946 106.482  1.00 80.70      A    N
ATOM    654  NH2 ARG A 205     274.297 -61.845 104.792  1.00 87.21      A    N
ATOM    655  C   ARG A 205     270.418 -67.012 101.120  1.00 56.37      A    C
ATOM    656  O   ARG A 205     271.034 -66.604 100.116  1.00 64.50      A    O
ATOM    657  N   VAL A 206     269.150 -67.373 101.124  1.00 54.49      A    N
ATOM    658  CA  VAL A 206     268.304 -67.238  99.960  1.00 50.29      A    C
ATOM    659  CB  VAL A 206     267.536 -68.522  99.670  1.00 47.01      A    C
ATOM    660  CG1 VAL A 206     266.800 -68.370  98.374  1.00 38.39      A    C
ATOM    661  CG2 VAL A 206     268.488 -69.696  99.620  1.00 42.93      A    C
ATOM    662  C   VAL A 206     267.306 -66.124 100.321  1.00 50.23      A    C
ATOM    663  O   VAL A 206     266.870 -65.982 101.487  1.00 49.82      A    O
ATOM    664  N   TYR A 207     266.958 -65.330  99.320  1.00 47.64      A    N
ATOM    665  CA  TYR A 207     266.053 -64.226  99.517  1.00 47.19      A    C
ATOM    666  CB  TYR A 207     266.748 -62.879  99.204  1.00 44.49      A    C
ATOM    667  CG  TYR A 207     268.077 -62.684  99.852  1.00 52.24      A    C
ATOM    668  CD1 TYR A 207     269.198 -63.362  99.385  1.00 51.97      A    C
ATOM    669  CE1 TYR A 207     270.438 -63.194  99.978  1.00 60.89      A    C
ATOM    670  CD2 TYR A 207     268.227 -61.820 100.938  1.00 55.49      A    C
ATOM    671  CE2 TYR A 207     269.499 -61.638 101.553  1.00 62.31      A    C
ATOM    672  CZ  TYR A 207     270.583 -62.327 101.069  1.00 60.88      A    C
ATOM    673  OH  TYR A 207     271.783 -62.141 101.704  1.00 68.24      A    O
ATOM    674  C   TYR A 207     264.837 -64.374  98.618  1.00 42.31      A    C
ATOM    675  O   TYR A 207     264.940 -64.704  97.438  1.00 43.03      A    O
ATOM    676  N   LEU A 208     263.671 -64.078  99.171  1.00 47.18      A    N
ATOM    677  CA  LEU A 208     262.441 -64.129  98.377  1.00 49.66      A    C
ATOM    678  CB  LEU A 208     261.411 -65.084  99.005  1.00 50.68      A    C
ATOM    679  CG  LEU A 208     261.731 -66.573  98.967  1.00 50.97      A    C
ATOM    680  CD1 LEU A 208     260.525 -67.349  99.471  1.00 51.61      A    C
ATOM    681  CD2 LEU A 208     262.019 -66.964  97.575  1.00 53.77      A    C
ATOM    682  C   LEU A 208     261.849 -62.733  98.264  1.00 50.25      A    C
ATOM    683  O   LEU A 208     261.525 -62.085  99.278  1.00 54.78      A    O
ATOM    684  N   ILE A 209     261.692 -62.286  97.027  1.00 50.37      A    N
ATOM    685  CA  ILE A 209     261.154 -60.971  96.752  1.00 49.74      A    C
ATOM    686  CB  ILE A 209     261.695 -60.499  95.420  1.00 50.44      A    C
ATOM    687  CG2 ILE A 209     261.168 -59.096  95.082  1.00 50.97      A    C
ATOM    688  CG1 ILE A 209     263.225 -60.485  95.511  1.00 49.66      A    C
ATOM    689  CD1 ILE A 209     263.919 -60.607  94.181  1.00 51.66      A    C
ATOM    690  C   ILE A 209     259.624 -61.075  96.749  1.00 51.17      A    C
ATOM    691  O   ILE A 209     259.048 -61.543  95.755  1.00 54.45      A    O
ATOM    692  N   LEU A 210     258.981 -60.655  97.854  1.00 47.03      A    N
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ATOM    693  CA  LEU A 210     257.530 -60.728  97.990  1.00 43.40      A    C
ATOM    694  CB  LEU A 210     257.164 -61.286  99.362  1.00 43.91      A    C
ATOM    695  CG  LEU A 210     257.762 -62.625  99.773  1.00 42.46      A    C
ATOM    696  CD1 LEU A 210     257.695 -62.764 101.264  1.00 44.44      A    C
ATOM    697  CD2 LEU A 210     257.029 -63.701  99.100  1.00 44.23      A    C
ATOM    698  C   LEU A 210     256.873 -59.393  97.827  1.00 42.69      A    C
ATOM    699  O   LEU A 210     257.528 -58.371  97.627  1.00 50.83      A    O
ATOM    700  N   GLU A 211     255.552 -59.403  97.901  1.00 45.93      A    N
ATOM    701  CA  GLU A 211     254.757 -58.173  97.813  1.00 41.90      A    C
ATOM    702  CB  GLU A 211     253.383 -58.471  97.201  1.00 39.85      A    C
ATOM    703  CG  GLU A 211     252.402 -57.354  97.290  1.00 41.17      A    C
ATOM    704  CD  GLU A 211     250.976 -57.788  96.890  1.00 51.54      A    C
ATOM    705  OE1 GLU A 211     250.012 -56.980  97.025  1.00 57.54      A    O
ATOM    706  OE2 GLU A 211     250.798 -58.950  96.438  1.00 52.59      A    O
ATOM    707  C   GLU A 211     254.608 -57.669  99.259  1.00 38.67      A    C
ATOM    708  O   GLU A 211     254.507 -58.477 100.200  1.00 42.39      A    O
ATOM    709  N   TYR A 212     254.619 -56.346  99.428  1.00 43.63      A    N
ATOM    710  CA  TYR A 212     254.500 -55.725 100.757  1.00 47.96      A    C
ATOM    711  CB  TYR A 212     255.181 -54.338 100.753  1.00 46.03      A    C
ATOM    712  CG  TYR A 212     255.029 -53.534 102.025  1.00 44.95      A    C
ATOM    713  CD1 TYR A 212     255.255 -54.104 103.259  1.00 42.54      A    C
ATOM    714  CE1 TYR A 212     255.084 -53.363 104.429  1.00 48.54      A    C
ATOM    715  CD2 TYR A 212     254.639 -52.193 101.984  1.00 44.86      A    C
ATOM    716  CE2 TYR A 212     254.473 -51.424 103.164  1.00 50.04      A    C
ATOM    717  CZ  TYR A 212     254.693 -52.019 104.372  1.00 48.45      A    C
ATOM    718  OH  TYR A 212     254.523 -51.276 105.514  1.00 53.45      A    O
ATOM    719  C   TYR A 212     253.041 -55.618 101.248  1.00 50.57      A    C
ATOM    720  O   TYR A 212     252.153 -55.140 100.508  1.00 51.02      A    O
ATOM    721  N   ALA A 213     252.799 -56.105 102.475  1.00 48.23      A    N
ATOM    722  CA  ALA A 213     251.459 -56.040 103.078  1.00 51.96      A    C
ATOM    723  CB  ALA A 213     251.084 -57.386 103.656  1.00 42.77      A    C
ATOM    724  C   ALA A 213     251.528 -54.973 104.177  1.00 46.25      A    C
ATOM    725  O   ALA A 213     251.958 -55.259 105.280  1.00 57.39      A    O
ATOM    726  N   PRO A 214     251.109 -53.734 103.869  1.00 45.44      A    N
ATOM    727  CD  PRO A 214     250.592 -53.315 102.549  1.00 45.81      A    C
ATOM    728  CA  PRO A 214     251.118 -52.597 104.782  1.00 37.64      A    C
ATOM    729  CB  PRO A 214     250.400 -51.512 103.991  1.00 44.41      A    C
ATOM    730  CG  PRO A 214     250.755 -51.821 102.584  1.00 45.51      A    C
ATOM    731  C   PRO A 214     250.481 -52.833 106.112  1.00 39.63      A    C
ATOM    732  O   PRO A 214     251.116 -52.486 107.123  1.00 38.67      A    O
ATOM    733  N   LEU A 215     249.287 -53.446 106.124  1.00 33.01      A    N
ATOM    734  CA  LEU A 215     248.570 -53.617 107.371  1.00 35.54      A    C
ATOM    735  CB  LEU A 215     247.074 -53.585 107.083  1.00 39.80      A    C
ATOM    736  CG  LEU A 215     246.571 -52.332 106.331  1.00 39.22      A    C
ATOM    737  CD1 LEU A 215     245.025 -52.236 106.407  1.00 37.56      A    C
ATOM    738  CD2 LEU A 215     247.156 -51.166 106.898  1.00 36.39      A    C
ATOM    739  C   LEU A 215     248.923 -54.805 108.248  1.00 43.21      A    C
ATOM    740  O   LEU A 215     248.208 -55.121 109.220  1.00 39.03      A    O
ATOM    741  N   GLY A 216     250.022 -55.466 107.906  1.00 42.62      A    N
ATOM    742  CA  GLY A 216     250.443 -56.630 108.669  1.00 46.42      A    C
ATOM    743  C   GLY A 216     249.594 -57.891 108.554  1.00 44.15      A    C
ATOM    744  O   GLY A 216     248.995 -58.166 107.504  1.00 46.45      A    O
ATOM    745  N   THR A 217     249.523 -58.640 109.656  1.00 39.98      A    N
ATOM    746  CA  THR A 217     248.774 -59.889 109.669  1.00 43.21      A    C
ATOM    747  CB  THR A 217     249.583 -61.040 110.286  1.00 43.67      A    C
ATOM    748  OG1 THR A 217     249.791 -60.782 111.678  1.00 51.00      A    O
ATOM    749  CG2 THR A 217     250.905 -61.201 109.605  1.00 41.04      A    C
ATOM    750  C   THR A 217     247.450 -59.858 110.416  1.00 42.99      A    C
ATOM    751  O   THR A 217     247.185 -58.962 111.227  1.00 41.59      A    O
ATOM    752  N   VAL A 218     246.646 -60.881 110.166  1.00 41.73      A    N
ATOM    753  CA  VAL A 218     245.335 -61.037 110.766  1.00 41.12      A    C
ATOM    754  CB  VAL A 218     244.564 -62.091 109.970  1.00 41.84      A    C
ATOM    755  CG1 VAL A 218     243.170 -62.251 110.488  1.00 43.61      A    C
ATOM    756  CG2 VAL A 218     244.544 -61.670 108.463  1.00 33.71      A    C
ATOM    757  C   VAL A 218     245.610 -61.486 112.201  1.00 40.94      A    C
ATOM    758  O   VAL A 218     244.789 -61.326 113.078  1.00 51.00      A    O
ATOM    759  N   TYR A 219     246.801 -62.026 112.429  1.00 45.88      A    N
ATOM    760  CA  TYR A 219     247.233 -62.484 113.757  1.00 42.54      A    C
ATOM    761  CB  TYR A 219     248.607 -63.148 113.673  1.00 45.91      A    C
ATOM    762  CG  TYR A 219     249.102 -63.676 115.011  1.00 46.80      A    C
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ATOM    763  CD1 TYR A 219     248.755 -64.925 115.464  1.00 45.83      A    C
ATOM    764  CE1 TYR A 219     249.176 -65.377 116.693  1.00 53.23      A    C
ATOM    765  CD2 TYR A 219     249.884 -62.892 115.825  1.00 46.38      A    C
ATOM    766  CE2 TYR A 219     250.310 -63.314 117.053  1.00 52.61      A    C
ATOM    767  CZ  TYR A 219     249.961 -64.565 117.510  1.00 53.76      A    C
ATOM    768  OH  TYR A 219     250.361 -64.985 118.789  1.00 54.10      A    O
ATOM    769  C   TYR A 219     247.323 -61.287 114.702  1.00 44.93      A    C
ATOM    770  O   TYR A 219     246.745 -61.322 115.825  1.00 40.09      A    O
ATOM    771  N   ARG A 220     248.031 -60.243 114.240  1.00 37.14      A    N
ATOM    772  CA  ARG A 220     248.172 -59.035 115.029  1.00 44.63      A    C
ATOM    773  CB  ARG A 220     249.213 -58.086 114.396  1.00 42.95      A    C
ATOM    774  C   ARG A 220     246.828 -58.318 115.225  1.00 43.95      A    C
ATOM    775  O   ARG A 220     246.563 -57.773 116.314  1.00 44.55      A    O
ATOM    776  N   GLU A 221     245.973 -58.369 114.198  1.00 44.85      A    N
ATOM    777  CA  GLU A 221     244.688 -57.692 114.255  1.00 43.30      A    C
ATOM    778  CB  GLU A 221     244.031 -57.678 112.884  1.00 46.86      A    C
ATOM    779  CG  GLU A 221     242.921 -56.648 112.713  1.00 56.65      A    C
ATOM    780  CD  GLU A 221     243.442 -55.193 112.758  1.00 63.09      A    C
ATOM    781  OE1 GLU A 221     242.629 -54.238 112.637  1.00 66.10      A    O
ATOM    782  OE2 GLU A 221     244.670 -55.005 112.919  1.00 66.07      A    O
ATOM    783  C   GLU A 221     243.806 -58.412 115.243  1.00 46.56      A    C
ATOM    784  O   GLU A 221     242.959 -57.802 115.900  1.00 44.66      A    O
ATOM    785  N   LEU A 222     244.028 -59.719 115.362  1.00 46.74      A    N
ATOM    786  CA  LEU A 222     243.259 -60.550 116.272  1.00 40.98      A    C
ATOM    787  CB  LEU A 222     243.444 -62.013 115.880  1.00 42.79      A    C
ATOM    788  CG  LEU A 222     242.339 -62.985 116.313  1.00 48.20      A    C
ATOM    789  CD1 LEU A 222     240.982 -62.509 115.826  1.00 42.35      A    C
ATOM    790  CD2 LEU A 222     242.649 -64.361 115.761  1.00 47.96      A    C
ATOM    791  C   LEU A 222     243.744 -60.292 117.718  1.00 45.64      A    C
ATOM    792  O   LEU A 222     242.995 -60.390 118.692  1.00 46.35      A    O
ATOM    793  N   GLN A 223     245.008 -59.938 117.875  1.00 47.19      A    N
ATOM    794  CA  GLN A 223     245.539 -59.670 119.203  1.00 48.16      A    C
ATOM    795  CB  GLN A 223     247.056 -59.584 119.112  1.00 49.22      A    C
ATOM    796  CG  GLN A 223     247.819 -60.926 119.032  1.00 56.96      A    C
ATOM    797  CD  GLN A 223     249.300 -60.732 118.879  1.00 66.12      A    C
ATOM    798  OE1 GLN A 223     249.807 -59.935 117.981  1.00 68.93      A    O
ATOM    799  NE2 GLN A 223     250.067 -61.453 119.755  1.00 65.96      A    N
ATOM    800  C   GLN A 223     244.994 -58.332 119.711  1.00 54.79      A    C
ATOM    801  O   GLN A 223     244.710 -58.153 120.899  1.00 63.31      A    O
ATOM    802  N   LYS A 224     244.877 -57.398 118.779  1.00 53.43      A    N
ATOM    803  CA  LYS A 224     244.412 -56.042 119.021  1.00 52.16      A    C
ATOM    804  CB  LYS A 224     244.668 -55.276 117.729  1.00 51.41      A    C
ATOM    805  CG  LYS A 224     244.740 -53.805 117.796  1.00 58.82      A    C
ATOM    806  CD  LYS A 224     245.109 -53.234 116.429  1.00 58.34      A    C
ATOM    807  CE  LYS A 224     244.105 -52.175 115.957  1.00 57.11      A    C
ATOM    808  NZ  LYS A 224     243.509 -52.549 114.632  1.00 62.05      A    N
ATOM    809  C   LYS A 224     242.909 -55.999 119.415  1.00 46.25      A    C
ATOM    810  O   LYS A 224     242.551 -55.374 120.392  1.00 53.53      A    O
ATOM    811  N   LEU A 225     242.054 -56.685 118.658  1.00 40.03      A    N
ATOM    812  CA  LEU A 225     240.616 -56.712 118.885  1.00 28.18      A    C
ATOM    813  CB  LEU A 225     239.918 -56.682 117.544  1.00 32.03      A    C
ATOM    814  CG  LEU A 225     240.538 -55.704 116.515  1.00 37.72      A    C
ATOM    815  CD1 LEU A 225     239.725 -55.736 115.208  1.00 28.64      A    C
ATOM    816  CD2 LEU A 225     240.577 -54.252 117.096  1.00 32.47      A    C
ATOM    817  C   LEU A 225     240.076 -57.907 119.686  1.00 39.70      A    C
ATOM    818  O   LEU A 225     238.896 -57.954 120.056  1.00 27.45      A    O
ATOM    819  N   SER A 226     240.939 -58.877 119.958  1.00 33.23      A    N
ATOM    820  CA  SER A 226     240.528 -60.051 120.695  1.00 38.91      A    C
ATOM    821  CB  SER A 226     239.864 -59.653 122.015  1.00 42.93      A    C
ATOM    822  OG  SER A 226     240.536 -58.570 122.642  1.00 59.01      A    O
ATOM    823  C   SER A 226     239.548 -60.869 119.867  1.00 40.96      A    C
ATOM    824  O   SER A 226     239.777 -62.029 119.592  1.00 45.01      A    O
ATOM    825  N   LYS A 227     238.433 -60.270 119.484  1.00 43.12      A    N
ATOM    826  CA  LYS A 227     237.409 -60.968 118.693  1.00 37.87      A    C
ATOM    827  CB  LYS A 227     236.160 -61.246 119.551  1.00 41.34      A    C
ATOM    828  CG  LYS A 227     236.384 -62.150 120.650  1.00 49.95      A    C
ATOM    829  CD  LYS A 227     235.126 -62.365 121.469  1.00 59.51      A    C
ATOM    830  CE  LYS A 227     234.854 -61.186 122.468  1.00 64.97      A    C
ATOM    831  NZ  LYS A 227     234.813 -61.628 123.907  1.00 64.50      A    N
ATOM    832  C   LYS A 227     237.009 -60.044 117.520  1.00 37.96      A    C
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ATOM    833  O   LYS A 227     237.061 -58.799 117.619  1.00 40.95      A    O
ATOM    834  N   PHE A 228     236.575 -60.655 116.431  1.00 34.94      A    N
ATOM    835  CA  PHE A 228     236.175 -59.917 115.262  1.00 34.74      A    C
ATOM    836  CB  PHE A 228     236.793 -60.534 113.998  1.00 34.85      A    C
ATOM    837  CG  PHE A 228     238.248 -60.293 113.849  1.00 43.10      A    C
ATOM    838  CD1 PHE A 228     238.975 -61.009 112.913  1.00 43.37      A    C
ATOM    839  CD2 PHE A 228     238.899 -59.395 114.656  1.00 38.38      A    C
ATOM    840  CE1 PHE A 228     240.341 -60.832 112.796  1.00 48.51      A    C
ATOM    841  CE2 PHE A 228     240.266 -59.207 114.554  1.00 47.20      A    C
ATOM    842  CZ  PHE A 228     240.999 -59.919 113.631  1.00 48.16      A    C
ATOM    843  C   PHE A 228     234.654 -60.063 115.208  1.00 40.38      A    C
ATOM    844  O   PHE A 228     234.102 -61.082 115.664  1.00 36.38      A    O
ATOM    845  N   ASP A 229     233.963 -59.053 114.687  1.00 40.55      A    N
ATOM    846  CA  ASP A 229     232.525 -59.184 114.534  1.00 38.86      A    C
ATOM    847  CB  ASP A 229     231.823 -57.832 114.440  1.00 49.26      A    C
ATOM    848  CG  ASP A 229     232.394 -56.912 113.357  1.00 51.97      A    C
ATOM    849  OD1 ASP A 229     232.396 -57.278 112.179  1.00 54.02      A    O
ATOM    850  OD2 ASP A 229     232.806 -55.788 113.699  1.00 55.60      A    O
ATOM    851  C   ASP A 229     232.180 -60.027 113.304  1.00 41.70      A    C
ATOM    852  O   ASP A 229     233.039 -60.366 112.480  1.00 35.62      A    O
ATOM    853  N   GLU A 230     230.905 -60.365 113.193  1.00 40.43      A    N
ATOM    854  CA  GLU A 230     230.434 -61.213 112.114  1.00 43.61      A    C
ATOM    855  CB  GLU A 230     228.939 -61.526 112.298  1.00 43.33      A    C
ATOM    856  CG  GLU A 230     228.630 -62.147 113.653  1.00 43.90      A    C
ATOM    857  CD  GLU A 230     227.292 -62.967 113.627  1.00 48.51      A    C
ATOM    858  OE1 GLU A 230     226.230 -62.374 113.308  1.00 37.93      A    O
ATOM    859  OE2 GLU A 230     227.300 -64.204 113.916  1.00 42.11      A    O
ATOM    860  C   GLU A 230     230.661 -60.546 110.778  1.00 43.16      A    C
ATOM    861  O   GLU A 230     230.878 -61.205 109.779  1.00 50.29      A    O
ATOM    862  N   GLN A 231     230.590 -59.225 110.748  1.00 49.18      A    N
ATOM    863  CA  GLN A 231     230.742 -58.501 109.489  1.00 49.70      A    C
ATOM    864  CB  GLN A 231     230.311 -57.029 109.685  1.00 57.14      A    C
ATOM    865  CG  GLN A 231     229.958 -56.236 108.412  1.00 62.54      A    C
ATOM    866  CD  GLN A 231     231.200 -55.770 107.642  1.00 71.69      A    C
ATOM    867  OE1 GLN A 231     232.065 -55.042 108.191  1.00 72.68      A    O
ATOM    868  NE2 GLN A 231     231.300 -56.184 106.359  1.00 72.33      A    N
ATOM    869  C   GLN A 231     232.197 -58.614 109.018  1.00 45.76      A    C
ATOM    870  O   GLN A 231     232.470 -58.874 107.846  1.00 46.46      A    O
ATOM    871  N   ARG A 232     233.131 -58.437 109.949  1.00 43.95      A    N
ATOM    872  CA  ARG A 232     234.560 -58.503 109.661  1.00 38.33      A    C
ATOM    873  CB  ARG A 232     235.365 -57.998 110.861  1.00 39.16      A    C
ATOM    874  CG  ARG A 232     236.867 -58.073 110.703  1.00 31.46      A    C
ATOM    875  CD  ARG A 232     237.514 -57.172 111.705  1.00 51.25      A    C
ATOM    876  NE  ARG A 232     238.871 -56.815 111.334  1.00 58.24      A    N
ATOM    877  CZ  ARG A 232     239.275 -55.581 111.111  1.00 65.45      A    C
ATOM    878  NH1 ARG A 232     238.395 -54.594 111.226  1.00 62.94      A    N
ATOM    879  NH2 ARG A 232     240.551 -55.369 110.780  1.00 72.17      A    N
ATOM    880  C   ARG A 232     234.950 -59.946 109.369  1.00 42.02      A    C
ATOM    881  O   ARG A 232     235.757 -60.183 108.517  1.00 45.04      A    O
ATOM    882  N   THR A 233     234.372 -60.909 110.084  1.00 43.50      A    N
ATOM    883  CA  THR A 233     234.697 -62.320 109.891  1.00 37.00      A    C
ATOM    884  CB  THR A 233     234.104 -63.175 110.992  1.00 35.89      A    C
ATOM    885  OG1 THR A 233     234.543 -62.696 112.268  1.00 30.74      A    O
ATOM    886  CG2 THR A 233     234.488 -64.641 110.763  1.00 22.73      A    C
ATOM    887  C   THR A 233     234.149 -62.834 108.555  1.00 45.73      A    C
ATOM    888  O   THR A 233     234.857 -63.523 107.844  1.00 45.99      A    O
ATOM    889  N   ALA A 234     232.892 -62.501 108.228  1.00 44.83      A    N
ATOM    890  CA  ALA A 234     232.256 -62.897 106.960  1.00 41.77      A    C
ATOM    891  CB  ALA A 234     230.852 -62.351 106.893  1.00 39.48      A    C
ATOM    892  C   ALA A 234     233.064 -62.395 105.744  1.00 44.77      A    C
ATOM    893  O   ALA A 234     233.273 -63.131 104.786  1.00 39.69      A    O
ATOM    894  N   THR A 235     233.543 -61.155 105.799  1.00 43.07      A    N
ATOM    895  CA  THR A 235     234.328 -60.579 104.722  1.00 44.31      A    C
ATOM    896  CB  THR A 235     234.557 -59.058 104.926  1.00 44.88      A    C
ATOM    897  OG1 THR A 235     233.306 -58.373 104.984  1.00 49.29      A    O
ATOM    898  CG2 THR A 235     235.343 -58.498 103.807  1.00 37.93      A    C
ATOM    899  C   THR A 235     235.689 -61.252 104.654  1.00 47.59      A    C
ATOM    900  O   THR A 235     236.169 -61.504 103.551  1.00 49.69      A    O
ATOM    901  N   TYR A 236     236.310 -61.521 105.813  1.00 47.35      A    N
ATOM    902  CA  TYR A 236     237.613 -62.189 105.850  1.00 46.90      A    C
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ATOM    903  CB  TYR A 236     238.206 -62.221 107.255  1.00 42.67      A    C
ATOM    904  CG  TYR A 236     239.024 -61.003 107.621  1.00 45.24      A    C
ATOM    905  CD1 TYR A 236     239.154 -59.930 106.767  1.00 40.32      A    C
ATOM    906  CE1 TYR A 236     239.909 -58.819 107.134  1.00 51.10      A    C
ATOM    907  CD2 TYR A 236     239.667 -60.929 108.847  1.00 46.47      A    C
ATOM    908  CE2 TYR A 236     240.430 -59.808 109.228  1.00 52.60      A    C
ATOM    909  CZ  TYR A 236     240.542 -58.764 108.367  1.00 49.08      A    C
ATOM    910  OH  TYR A 236     241.265 -57.653 108.719  1.00 58.26      A    O
ATOM    911  C   TYR A 236     237.496 -63.604 105.334  1.00 47.98      A    C
ATOM    912  O   TYR A 236     238.469 -64.148 104.832  1.00 58.71      A    O
ATOM    913  N   ILE A 237     236.296 -64.177 105.416  1.00 50.41      A    N
ATOM    914  CA  ILE A 237     236.032 -65.540 104.944  1.00 46.45      A    C
ATOM    915  CB  ILE A 237     234.816 -66.156 105.635  1.00 45.13      A    C
ATOM    916  CG2 ILE A 237     234.357 -67.442 104.903  1.00 42.23      A    C
ATOM    917  CG1 ILE A 237     235.157 -66.440 107.101  1.00 42.93      A    C
ATOM    918  CD1 ILE A 237     236.253 -67.436 107.317  1.00 39.73      A    C
ATOM    919  C   ILE A 237     235.798 -65.597 103.462  1.00 51.53      A    C
ATOM    920  O   ILE A 237     236.213 -66.548 102.822  1.00 55.68      A    O
ATOM    921  N   THR A 238     235.148 -64.571 102.914  1.00 51.45      A    N
ATOM    922  CA  THR A 238     234.858 -64.526 101.471  1.00 44.65      A    C
ATOM    923  CB  THR A 238     233.929 -63.346 101.106  1.00 44.82      A    C
ATOM    924  OG1 THR A 238     232.653 -63.512 101.719  1.00 43.65      A    O
ATOM    925  CG2 THR A 238     233.701 -63.294  99.660  1.00 44.50      A    C
ATOM    926  C   THR A 238     236.166 -64.350 100.706  1.00 47.18      A    C
ATOM    927  O   THR A 238     236.467 -65.090  99.782  1.00 48.37      A    O
ATOM    928  N   GLU A 239     236.956 -63.367 101.116  1.00 49.98      A    N
ATOM    929  CA  GLU A 239     238.239 -63.082 100.473  1.00 52.23      A    C
ATOM    930  CB  GLU A 239     238.937 -61.932 101.203  1.00 54.22      A    C
ATOM    931  CG  GLU A 239     238.139 -60.624 101.260  1.00 55.95      A    C
ATOM    932  CD  GLU A 239     238.811 -59.573 102.137  1.00 58.38      A    C
ATOM    933  OE1 GLU A 239     239.056 -59.843 103.333  1.00 65.65      A    O
ATOM    934  OE2 GLU A 239     239.099 -58.468 101.634  1.00 60.73      A    O
ATOM    935  C   GLU A 239     239.109 -64.330 100.496  1.00 50.02      A    C
ATOM    936  O   GLU A 239     239.851 -64.616  99.561  1.00 55.72      A    O
ATOM    937  N   LEU A 240     238.978 -65.104 101.557  1.00 49.14      A    N
ATOM    938  CA  LEU A 240     239.768 -66.305 101.702  1.00 48.27      A    C
ATOM    939  CB  LEU A 240     239.776 -66.717 103.173  1.00 46.82      A    C
ATOM    940  CG  LEU A 240     240.917 -67.581 103.679  1.00 45.79      A    C
ATOM    941  CD1 LEU A 240     242.225 -67.030 103.195  1.00 50.28      A    C
ATOM    942  CD2 LEU A 240     240.885 -67.603 105.172  1.00 53.83      A    C
ATOM    943  C   LEU A 240     239.209 -67.420 100.833  1.00 49.65      A    C
ATOM    944  O   LEU A 240     239.960 -68.170 100.210  1.00 53.66      A    O
ATOM    945  N   ALA A 241     237.883 -67.519 100.778  1.00 45.02      A    N
ATOM    946  CA  ALA A 241     237.222 -68.549  99.965  1.00 50.04      A    C
ATOM    947  CB  ALA A 241     235.724 -68.611 100.256  1.00 39.53      A    C
ATOM    948  C   ALA A 241     237.447 -68.278  98.481  1.00 47.71      A    C
ATOM    949  O   ALA A 241     237.495 -69.203  97.682  1.00 54.94      A    O
ATOM    950  N   ASN A 242     237.585 -67.012  98.114  1.00 49.50      A    N
ATOM    951  CA  ASN A 242     237.839 -66.637  96.729  1.00 51.78      A    C
ATOM    952  CB  ASN A 242     237.688 -65.134  96.554  1.00 45.48      A    C
ATOM    953  CG  ASN A 242     236.231 -64.680  96.592  1.00 51.39      A    C
ATOM    954  OD1 ASN A 242     235.972 -63.489  96.769  1.00 50.23      A    O
ATOM    955  ND2 ASN A 242     235.276 -65.620  96.412  1.00 43.58      A    N
ATOM    956  C   ASN A 242     239.241 -67.046  96.330  1.00 50.85      A    C
ATOM    957  O   ASN A 242     239.419 -67.736  95.323  1.00 53.87      A    O
ATOM    958  N   ALA A 243     240.230 -66.625  97.119  1.00 48.27      A    N
ATOM    959  CA  ALA A 243     241.629 -66.970  96.861  1.00 42.21      A    C
ATOM    960  CB  ALA A 243     242.534 -66.345  97.913  1.00 45.13      A    C
ATOM    961  C   ALA A 243     241.816 -68.473  96.880  1.00 43.95      A    C
ATOM    962  O   ALA A 243     242.498 -69.016  96.026  1.00 42.43      A    O
ATOM    963  N   LEU A 244     241.219 -69.152  97.858  1.00 40.59      A    N
ATOM    964  CA  LEU A 244     241.366 -70.606  97.945  1.00 48.68      A    C
ATOM    965  CB  LEU A 244     240.689 -71.141  99.204  1.00 42.37      A    C
ATOM    966  CG  LEU A 244     241.465 -70.944 100.495  1.00 39.60      A    C
ATOM    967  CD1 LEU A 244     240.751 -71.763 101.602  1.00 37.99      A    C
ATOM    968  CD2 LEU A 244     242.889 -71.432 100.340  1.00 35.22      A    C
ATOM    969  C   LEU A 244     240.779 -71.311  96.702  1.00 56.87      A    C
ATOM    970  O   LEU A 244     241.327 -72.330  96.220  1.00 60.52      A    O
ATOM    971  N   SER A 245     239.662 -70.777  96.200  1.00 61.51      A    N
ATOM    972  CA  SER A 245     239.010 -71.317  95.018  1.00 61.35      A    C
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ATOM    973  CB  SER A 245     237.785 -70.501  94.692  1.00 64.64      A    C
ATOM    974  OG  SER A 245     237.339 -70.779  93.390  1.00 71.14      A    O
ATOM    975  C   SER A 245     239.981 -71.242  93.855  1.00 63.54      A    C
ATOM    976  O   SER A 245     240.179 -72.233  93.134  1.00 63.37      A    O
ATOM    977  N   TYR A 246     240.581 -70.063  93.679  1.00 58.29      A    N
ATOM    978  CA  TYR A 246     241.571 -69.855  92.633  1.00 57.08      A    C
ATOM    979  CB  TYR A 246     242.123 -68.455  92.719  1.00 51.38      A    C
ATOM    980  CG  TYR A 246     243.247 -68.195  91.754  1.00 55.36      A    C
ATOM    981  CD1 TYR A 246     242.994 -67.652  90.492  1.00 50.94      A    C
ATOM    982  CE1 TYR A 246     244.042 -67.382  89.609  1.00 55.86      A    C
ATOM    983  CD2 TYR A 246     244.584 -68.473  92.111  1.00 54.39      A    C
ATOM    984  CE2 TYR A 246     245.650 -68.213  91.234  1.00 55.81      A    C
ATOM    985  CZ  TYR A 246     245.372 -67.665  89.982  1.00 55.07      A    C
ATOM    986  OH  TYR A 246     246.409 -67.409  89.112  1.00 55.05      A    O
ATOM    987  C   TYR A 246     242.732 -70.852  92.733  1.00 57.54      A    C
ATOM    988  O   TYR A 246     243.234 -71.322  91.718  1.00 64.40      A    O
ATOM    989  N   CYS A 247     243.150 -71.180  93.951  1.00 56.76      A    N
ATOM    990  CA  CYS A 247     244.245 -72.120  94.148  1.00 57.81      A    C
ATOM    991  CB  CYS A 247     244.779 -72.066  95.599  1.00 52.55      A    C
ATOM    992  SG  CYS A 247     245.687 -70.569  96.004  1.00 57.32      A    S
ATOM    993  C   CYS A 247     243.813 -73.538  93.837  1.00 59.03      A    C
ATOM    994  O   CYS A 247     244.535 -74.272  93.143  1.00 61.55      A    O
ATOM    995  N   HIS A 248     242.659 -73.930  94.374  1.00 60.08      A    N
ATOM    996  CA  HIS A 248     242.151 -75.291  94.156  1.00 58.63      A    C
ATOM    997  CB  HIS A 248     240.916 -75.540  95.036  1.00 57.40      A    C
ATOM    998  CG  HIS A 248     241.217 -75.606  96.496  1.00 54.60      A    C
ATOM    999  CD2 HIS A 248     242.393 -75.694  97.160  1.00 54.55      A    C
ATOM   1000  ND1 HIS A 248     240.231 -75.623  97.459  1.00 54.23      A    N
ATOM   1001  CE1 HIS A 248     240.789 -75.721  98.654  1.00 51.97      A    C
ATOM   1002  NE2 HIS A 248     242.099 -75.765  98.501  1.00 50.58      A    N
ATOM   1003  C   HIS A 248     241.806 -75.535  92.668  1.00 58.67      A    C
ATOM   1004  O   HIS A 248     241.857 -76.667  92.171  1.00 50.45      A    O
ATOM   1005  N   SER A 249     241.459 -74.464  91.959  1.00 53.97      A    N
ATOM   1006  CA  SER A 249     241.133 -74.589  90.550  1.00 58.32      A    C
ATOM   1007  CB  SER A 249     240.647 -73.248  89.991  1.00 55.40      A    C
ATOM   1008  OG  SER A 249     241.757 -72.480  89.526  1.00 54.94      A    O
ATOM   1009  C   SER A 249     242.407 -75.020  89.798  1.00 58.15      A    C
ATOM   1010  O   SER A 249     242.326 -75.573  88.707  1.00 70.94      A    O
ATOM   1011  N   LYS A 250     243.574 -74.746  90.370  1.00 51.49      A    N
ATOM   1012  CA  LYS A 250     244.820 -75.119  89.753  1.00 46.67      A    C
ATOM   1013  CB  LYS A 250     245.818 -73.947  89.805  1.00 31.37      A    C
ATOM   1014  C   LYS A 250     245.364 -76.343  90.494  1.00 50.71      A    C
ATOM   1015  O   LYS A 250     246.506 -76.755  90.233  1.00 60.01      A    O
ATOM   1016  N   ARG A 251     244.553 -76.931  91.389  1.00 52.78      A    N
ATOM   1017  CA  ARG A 251     244.965 -78.113  92.167  1.00 55.47      A    C
ATOM   1018  CB  ARG A 251     245.383 -79.258  91.244  1.00 58.86      A    C
ATOM   1019  CG  ARG A 251     244.211 -79.957  90.536  1.00 62.01      A    C
ATOM   1020  CD  ARG A 251     244.126 -81.392  90.989  1.00 65.71      A    C
ATOM   1021  NE  ARG A 251     242.807 -81.741  91.512  1.00 68.34      A    N
ATOM   1022  CZ  ARG A 251     242.484 -82.945  92.002  1.00 72.31      A    C
ATOM   1023  NH1 ARG A 251     243.384 -83.929  92.045  1.00 72.96      A    N
ATOM   1024  NH2 ARG A 251     241.252 -83.178  92.445  1.00 71.74      A    N
ATOM   1025  C   ARG A 251     246.099 -77.840  93.137  1.00 53.93      A    C
ATOM   1026  O   ARG A 251     247.007 -78.666  93.285  1.00 57.77      A    O
ATOM   1027  N   VAL A 252     246.043 -76.686  93.799  1.00 56.22      A    N
ATOM   1028  CA  VAL A 252     247.072 -76.314  94.774  1.00 53.20      A    C
ATOM   1029  CB  VAL A 252     247.721 -74.966  94.401  1.00 50.06      A    C
ATOM   1030  CG1 VAL A 252     248.682 -74.549  95.463  1.00 49.54      A    C
ATOM   1031  CG2 VAL A 252     248.418 -75.083  93.080  1.00 48.46      A    C
ATOM   1032  C   VAL A 252     246.492 -76.207  96.196  1.00 54.67      A    C
ATOM   1033  O   VAL A 252     245.536 -75.465  96.426  1.00 56.55      A    O
ATOM   1034  N   ILE A 253     247.074 -76.956  97.130  1.00 52.34      A    N
ATOM   1035  CA  ILE A 253     246.641 -76.948  98.498  1.00 42.71      A    C
ATOM   1036  CB  ILE A 253     246.696 -78.341  99.103  1.00 38.24      A    C
ATOM   1037  CG2 ILE A 253     245.676 -78.449 100.219  1.00 44.12      A    C
ATOM   1038  CG1 ILE A 253     246.279 -79.380  98.083  1.00 35.92      A    C
ATOM   1039  CD1 ILE A 253     246.298 -80.813  98.644  1.00 42.55      A    C
ATOM   1040  C   ILE A 253     247.600 -76.096  99.279  1.00 48.08      A    C
ATOM   1041  O   ILE A 253     248.803 -76.288  99.163  1.00 60.87      A    O
ATOM   1042  N   HIS A 254     247.084 -75.165 100.086  1.00 50.60      A    N
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ATOM   1043  CA  HIS A 254     247.955 -74.319 100.906  1.00 45.11      A    C
ATOM   1044  CB  HIS A 254     247.187 -73.086 101.374  1.00 43.92      A    C
ATOM   1045  CG  HIS A 254     248.071 -72.014 101.916  1.00 44.85      A    C
ATOM   1046  CD2 HIS A 254     248.486 -70.854 101.360  1.00 39.20      A    C
ATOM   1047  ND1 HIS A 254     248.670 -72.089 103.158  1.00 39.59      A    N
ATOM   1048  CE1 HIS A 254     249.414 -71.014 103.339  1.00 37.61      A    C
ATOM   1049  NE2 HIS A 254     249.318 -70.250 102.265  1.00 38.54      A    N
ATOM   1050  C   HIS A 254     248.490 -75.117 102.103  1.00 44.15      A    C
ATOM   1051  O   HIS A 254     249.681 -75.123 102.372  1.00 48.22      A    O
ATOM   1052  N   ARG A 255     247.587 -75.802 102.793  1.00 42.94      A    N
ATOM   1053  CA  ARG A 255     247.899 -76.642 103.946  1.00 38.93      A    C
ATOM   1054  CB  ARG A 255     248.829 -77.796 103.512  1.00 44.03      A    C
ATOM   1055  CG  ARG A 255     248.460 -78.369 102.124  1.00 46.01      A    C
ATOM   1056  CD  ARG A 255     249.154 -79.689 101.884  1.00 54.38      A    C
ATOM   1057  NE  ARG A 255     250.581 -79.648 102.175  1.00 53.55      A    N
ATOM   1058  CZ  ARG A 255     251.402 -80.673 102.012  1.00 53.89      A    C
ATOM   1059  NH1 ARG A 255     250.938 -81.808 101.562  1.00 52.04      A    N
ATOM   1060  NH2 ARG A 255     252.679 -80.560 102.313  1.00 55.38      A    N
ATOM   1061  C   ARG A 255     248.477 -75.929 105.145  1.00 37.93      A    C
ATOM   1062  O   ARG A 255     248.891 -76.588 106.101  1.00 37.60      A    O
ATOM   1063  N   ASP A 256     248.541 -74.598 105.096  1.00 40.81      A    N
ATOM   1064  CA  ASP A 256     249.090 -73.852 106.231  1.00 41.86      A    C
ATOM   1065  CB  ASP A 256     250.578 -73.685 106.031  1.00 38.62      A    C
ATOM   1066  CG  ASP A 256     251.299 -73.245 107.284  1.00 42.25      A    C
ATOM   1067  OD1 ASP A 256     250.822 -73.586 108.373  1.00 44.21      A    O
ATOM   1068  OD2 ASP A 256     252.367 -72.594 107.177  1.00 39.16      A    O
ATOM   1069  C   ASP A 256     248.415 -72.491 106.390  1.00 45.37      A    C
ATOM   1070  O   ASP A 256     249.065 -71.464 106.563  1.00 52.63      A    O
ATOM   1071  N   ILE A 257     247.092 -72.503 106.340  1.00 49.04      A    N
ATOM   1072  CA  ILE A 257     246.307 -71.289 106.456  1.00 56.39      A    C
ATOM   1073  CB  ILE A 257     244.939 -71.461 105.776  1.00 52.32      A    C
ATOM   1074  CG2 ILE A 257     244.163 -70.205 105.893  1.00 55.85      A    C
ATOM   1075  CG1 ILE A 257     245.143 -71.785 104.305  1.00 60.94      A    C
ATOM   1076  CD1 ILE A 257     243.873 -72.064 103.557  1.00 73.36      A    C
ATOM   1077  C   ILE A 257     246.097 -70.940 107.922  1.00 54.79      A    C
ATOM   1078  O   ILE A 257     245.502 -71.720 108.659  1.00 61.06      A    O
ATOM   1079  N   LYS A 258     246.594 -69.781 108.345  1.00 50.33      A    N
ATOM   1080  CA  LYS A 258     246.428 -69.356 109.719  1.00 46.70      A    C
ATOM   1081  CB  LYS A 258     247.273 -70.220 110.648  1.00 41.61      A    C
ATOM   1082  CG  LYS A 258     248.687 -70.371 110.232  1.00 49.22      A    C
ATOM   1083  CD  LYS A 258     249.425 -71.326 111.200  1.00 42.38      A    C
ATOM   1084  CE  LYS A 258     250.826 -71.627 110.697  1.00 51.66      A    C
ATOM   1085  NZ  LYS A 258     251.488 -72.718 111.456  1.00 40.89      A    N
ATOM   1086  C   LYS A 258     246.756 -67.876 109.860  1.00 45.25      A    C
ATOM   1087  O   LYS A 258     247.504 -67.337 109.042  1.00 41.75      A    O
ATOM   1088  N   PRO A 259     246.189 -67.209 110.898  1.00 38.54      A    N
ATOM   1089  CD  PRO A 259     245.436 -67.848 111.999  1.00 30.99      A    C
ATOM   1090  CA  PRO A 259     246.389 -65.786 111.172  1.00 33.18      A    C
ATOM   1091  CB  PRO A 259     246.034 -65.680 112.643  1.00 36.45      A    C
ATOM   1092  CG  PRO A 259     244.915 -66.649 112.762  1.00 29.46      A    C
ATOM   1093  C   PRO A 259     247.783 -65.250 110.858  1.00 39.75      A    C
ATOM   1094  O   PRO A 259     247.899 -64.163 110.345  1.00 46.84      A    O
ATOM   1095  N   GLU A 260     248.836 -65.999 111.177  1.00 43.95      A    N
ATOM   1096  CA  GLU A 260     250.227 -65.591 110.916  1.00 44.86      A    C
ATOM   1097  CB  GLU A 260     251.224 -66.603 111.505  1.00 50.78      A    C
ATOM   1098  CG  GLU A 260     251.039 -66.922 112.948  1.00 65.67      A    C
ATOM   1099  CD  GLU A 260     249.918 -67.897 113.213  1.00 69.34      A    C
ATOM   1100  OE1 GLU A 260     248.727 -67.499 113.338  1.00 69.34      A    O
ATOM   1101  OE2 GLU A 260     250.264 -69.089 113.299  1.00 80.21      A    O
ATOM   1102  C   GLU A 260     250.514 -65.476 109.430  1.00 39.11      A    C
ATOM   1103  O   GLU A 260     251.197 -64.554 109.027  1.00 44.76      A    O
ATOM   1104  N   ASN A 261     250.029 -66.425 108.622  1.00 40.15      A    N
ATOM   1105  CA  ASN A 261     250.246 -66.396 107.162  1.00 38.92      A    C
ATOM   1106  CB  ASN A 261     250.401 -67.817 106.608  1.00 36.39      A    C
ATOM   1107  CG  ASN A 261     251.539 -68.579 107.266  1.00 36.54      A    C
ATOM   1108  OD1 ASN A 261     252.609 -68.045 107.462  1.00 41.73      A    O
ATOM   1109  ND2 ASN A 261     251.317 -69.831 107.578  1.00 30.81      A    N
ATOM   1110  C   ASN A 261     249.151 -65.638 106.361  1.00 38.95      A    C
ATOM   1111  O   ASN A 261     249.142 -65.652 105.149  1.00 40.40      A    O
ATOM   1112  N   LEU A 262     248.245 -64.953 107.046  1.00 42.51      A    N
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ATOM   1113  CA  LEU A 262     247.197 -64.169 106.386  1.00 42.29      A    C
ATOM   1114  CB  LEU A 262     245.800 -64.450 106.967  1.00 36.57      A    C
ATOM   1115  CG  LEU A 262     245.209 -65.819 106.657  1.00 37.41      A    C
ATOM   1116  CD1 LEU A 262     243.773 -65.817 107.071  1.00 33.79      A    C
ATOM   1117  CD2 LEU A 262     245.324 -66.152 105.193  1.00 39.29      A    C
ATOM   1118  C   LEU A 262     247.548 -62.703 106.582  1.00 41.70      A    C
ATOM   1119  O   LEU A 262     247.543 -62.205 107.717  1.00 44.29      A    O
ATOM   1120  N   LEU A 263     247.857 -62.021 105.473  1.00 38.70      A    N
ATOM   1121  CA  LEU A 263     248.238 -60.610 105.505  1.00 26.99      A    C
ATOM   1122  CB  LEU A 263     249.475 -60.392 104.679  1.00 36.05      A    C
ATOM   1123  CG  LEU A 263     250.658 -61.333 104.917  1.00 31.41      A    C
ATOM   1124  CD1 LEU A 263     251.820 -60.991 103.978  1.00 33.22      A    C
ATOM   1125  CD2 LEU A 263     251.081 -61.269 106.325  1.00 29.25      A    C
ATOM   1126  C   LEU A 263     247.144 -59.677 105.013  1.00 35.80      A    C
ATOM   1127  O   LEU A 263     246.220 -60.100 104.304  1.00 32.87      A    O
ATOM   1128  N   LEU A 264     247.245 -58.408 105.410  1.00 31.98      A    N
ATOM   1129  CA  LEU A 264     246.246 -57.428 105.041  1.00 33.35      A    C
ATOM   1130  CB  LEU A 264     245.703 -56.729 106.303  1.00 31.72      A    C
ATOM   1131  CG  LEU A 264     244.971 -57.619 107.303  1.00 28.92      A    C
ATOM   1132  CD1 LEU A 264     244.728 -56.820 108.620  1.00 24.69      A    C
ATOM   1133  CD2 LEU A 264     243.644 -58.095 106.660  1.00 26.84      A    C
ATOM   1134  C   LEU A 264     246.884 -56.419 104.110  1.00 35.86      A    C
ATOM   1135  O   LEU A 264     247.974 -55.944 104.368  1.00 40.12      A    O
ATOM   1136  N   GLY A 265     246.188 -56.100 103.026  1.00 36.89      A    N
ATOM   1137  CA  GLY A 265     246.674 -55.133 102.045  1.00 43.31      A    C
ATOM   1138  C   GLY A 265     246.399 -53.673 102.351  1.00 43.89      A    C
ATOM   1139  O   GLY A 265     245.889 -53.350 103.401  1.00 48.54      A    O
ATOM   1140  N   SER A 266     246.742 -52.796 101.422  1.00 48.23      A    N
ATOM   1141  CA  SER A 266     246.567 -51.364 101.591  1.00 49.09      A    C
ATOM   1142  CB  SER A 266     246.936 -50.647 100.304  1.00 51.41      A    C
ATOM   1143  OG  SER A 266     246.057 -51.012  99.237  1.00 64.31      A    O
ATOM   1144  C   SER A 266     245.138 -51.019 101.970  1.00 51.39      A    C
ATOM   1145  O   SER A 266     244.915 -50.247 102.883  1.00 54.83      A    O
ATOM   1146  N   ALA A 267     244.162 -51.588 101.271  1.00 54.20      A    N
ATOM   1147  CA  ALA A 267     242.749 -51.323 101.577  1.00 47.57      A    C
ATOM   1148  CB  ALA A 267     241.921 -51.394 100.320  1.00 47.18      A    C
ATOM   1149  C   ALA A 267     242.203 -52.330 102.595  1.00 48.50      A    C
ATOM   1150  O   ALA A 267     241.010 -52.582 102.620  1.00 50.25      A    O
ATOM   1151  N   GLY A 268     243.084 -52.913 103.410  1.00 45.91      A    N
ATOM   1152  CA  GLY A 268     242.665 -53.860 104.420  1.00 38.28      A    C
ATOM   1153  C   GLY A 268     242.192 -55.187 103.868  1.00 42.82      A    C
ATOM   1154  O   GLY A 268     241.652 -56.003 104.639  1.00 43.08      A    O
ATOM   1155  N   GLU A 269     242.396 -55.431 102.569  1.00 42.29      A    N
ATOM   1156  CA  GLU A 269     241.958 -56.697 101.992  1.00 40.12      A    C
ATOM   1157  CB  GLU A 269     241.996 -56.635 100.480  1.00 44.93      A    C
ATOM   1158  CG  GLU A 269     243.430 -56.655  99.871  1.00 51.34      A    C
ATOM   1159  CD  GLU A 269     243.997 -55.261  99.657  1.00 57.16      A    C
ATOM   1160  OE1 GLU A 269     244.081 -54.491 100.642  1.00 51.07      A    O
ATOM   1161  OE2 GLU A 269     244.350 -54.945  98.493  1.00 61.02      A    O
ATOM   1162  C   GLU A 269     242.872 -57.847 102.472  1.00 44.10      A    C
ATOM   1163  O   GLU A 269     244.053 -57.652 102.807  1.00 43.32      A    O
ATOM   1164  N   LEU A 270     242.331 -59.059 102.481  1.00 43.44      A    N
ATOM   1165  CA  LEU A 270     243.076 -60.228 102.927  1.00 44.15      A    C
ATOM   1166  CB  LEU A 270     242.102 -61.333 103.323  1.00 50.71      A    C
ATOM   1167  CG  LEU A 270     242.624 -62.428 104.232  1.00 53.26      A    C
ATOM   1168  CD1 LEU A 270     242.304 -62.033 105.661  1.00 60.78      A    C
ATOM   1169  CD2 LEU A 270     241.999 -63.736 103.906  1.00 50.44      A    C
ATOM   1170  C   LEU A 270     243.985 -60.731 101.813  1.00 44.35      A    C
ATOM   1171  O   LEU A 270     243.728 -60.526 100.635  1.00 49.43      A    O
ATOM   1172  N   LYS A 271     245.063 -61.398 102.188  1.00 40.19      A    N
ATOM   1173  CA  LYS A 271     245.994 -61.946 101.211  1.00 31.70      A    C
ATOM   1174  CB  LYS A 271     247.028 -60.897 100.819  1.00 32.47      A    C
ATOM   1175  CG  LYS A 271     246.604 -59.930  99.753  1.00 31.86      A    C
ATOM   1176  CD  LYS A 271     247.492 -58.692  99.731  1.00 35.87      A    C
ATOM   1177  CE  LYS A 271     247.103 -57.715  98.619  1.00 42.09      A    C
ATOM   1178  NZ  LYS A 271     247.551 -58.225  97.303  1.00 58.37      A    N
ATOM   1179  C   LYS A 271     246.714 -63.148 101.820  1.00 41.22      A    C
ATOM   1180  O   LYS A 271     247.433 -63.023 102.807  1.00 49.74      A    O
ATOM   1181  N   ILE A 272     246.505 -64.322 101.249  1.00 39.27      A    N
ATOM   1182  CA  ILE A 272     247.155 -65.524 101.741  1.00 34.76      A    C
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ATOM   1183  CB  ILE A 272     246.491 -66.758 101.150  1.00 44.34      A    C
ATOM   1184  CG2 ILE A 272     246.821 -67.987 102.002  1.00 55.36      A    C
ATOM   1185  CG1 ILE A 272     244.973 -66.577 101.161  1.00 50.03      A    C
ATOM   1186  CD1 ILE A 272     244.215 -67.794 100.577  1.00 52.97      A    C
ATOM   1187  C   ILE A 272     248.617 -65.530 101.319  1.00 41.49      A    C
ATOM   1188  O   ILE A 272     248.918 -65.272 100.168  1.00 40.02      A    O
ATOM   1189  N   ALA A 273     249.524 -65.832 102.243  1.00 39.46      A    N
ATOM   1190  CA  ALA A 273     250.936 -65.861 101.931  1.00 38.71      A    C
ATOM   1191  CB  ALA A 273     251.588 -64.617 102.514  1.00 40.33      A    C
ATOM   1192  C   ALA A 273     251.592 -67.137 102.487  1.00 46.92      A    C
ATOM   1193  O   ALA A 273     250.910 -68.063 102.901  1.00 49.16      A    O
ATOM   1194  N   ASP A 274     252.923 -67.165 102.493  1.00 51.43      A    N
ATOM   1195  CA  ASP A 274     253.703 -68.293 102.997  1.00 51.40      A    C
ATOM   1196  CB  ASP A 274     253.686 -68.323 104.530  1.00 50.98      A    C
ATOM   1197  CG  ASP A 274     254.601 -69.361 105.083  1.00 42.10      A    C
ATOM   1198  OD1 ASP A 274     255.660 -69.637 104.516  1.00 54.26      A    O
ATOM   1199  OD2 ASP A 274     254.299 -69.914 106.121  1.00 52.11      A    O
ATOM   1200  C   ASP A 274     253.224 -69.618 102.433  1.00 51.38      A    C
ATOM   1201  O   ASP A 274     252.572 -70.382 103.133  1.00 53.85      A    O
ATOM   1202  N   PHE A 275     253.540 -69.863 101.159  1.00 53.60      A    N
ATOM   1203  CA  PHE A 275     253.173 -71.097 100.476  1.00 46.97      A    C
ATOM   1204  CB  PHE A 275     252.975 -70.871  98.973  1.00 42.90      A    C
ATOM   1205  CG  PHE A 275     251.733 -70.169  98.636  1.00 45.54      A    C
ATOM   1206  CD1 PHE A 275     251.527 -68.830  99.048  1.00 45.75      A    C
ATOM   1207  CD2 PHE A 275     250.737 -70.843  97.917  1.00 41.77      A    C
ATOM   1208  CE1 PHE A 275     250.305 -68.152  98.737  1.00 48.01      A    C
ATOM   1209  CE2 PHE A 275     249.503 -70.195  97.591  1.00 46.76      A    C
ATOM   1210  CZ  PHE A 275     249.279 -68.840  98.000  1.00 48.77      A    C
ATOM   1211  C   PHE A 275     254.270 -72.149 100.678  1.00 43.41      A    C
ATOM   1212  O   PHE A 275     254.496 -72.970  99.791  1.00 36.81      A    O
ATOM   1213  N   GLY A 276     254.938 -72.109 101.843  1.00 42.93      A    N
ATOM   1214  CA  GLY A 276     255.969 -73.079 102.214  1.00 37.83      A    C
ATOM   1215  C   GLY A 276     255.471 -74.522 102.210  1.00 35.71      A    C
ATOM   1216  O   GLY A 276     256.197 -75.412 101.834  1.00 45.98      A    O
ATOM   1217  N   TRP A 277     254.227 -74.768 102.608  1.00 40.57      A    N
ATOM   1218  CA  TRP A 277     253.676 -76.118 102.591  1.00 36.62      A    C
ATOM   1219  CB  TRP A 277     252.882 -76.378 103.859  1.00 42.09      A    C
ATOM   1220  CG  TRP A 277     253.751 -76.592 105.041  1.00 50.97      A    C
ATOM   1221  CD2 TRP A 277     254.089 -77.854 105.629  1.00 58.62      A    C
ATOM   1222  CE2 TRP A 277     254.960 -77.593 106.702  1.00 58.91      A    C
ATOM   1223  CE3 TRP A 277     253.726 -79.182 105.360  1.00 59.93      A    C
ATOM   1224  CD1 TRP A 277     254.420 -75.640 105.759  1.00 54.30      A    C
ATOM   1225  NE1 TRP A 277     255.150 -76.235 106.758  1.00 59.86      A    N
ATOM   1226  CZ2 TRP A 277     255.482 -78.610 107.501  1.00 61.19      A    C
ATOM   1227  CZ3 TRP A 277     254.244 -80.188 106.162  1.00 61.29      A    C
ATOM   1228  CH2 TRP A 277     255.108 -79.892 107.219  1.00 63.73      A    C
ATOM   1229  C   TRP A 277     252.777 -76.364 101.408  1.00 35.74      A    C
ATOM   1230  O   TRP A 277     252.212 -77.442 101.298  1.00 35.61      A    O
ATOM   1231  N   SER A 278     252.636 -75.372 100.528  1.00 44.94      A    N
ATOM   1232  CA  SER A 278     251.779 -75.474  99.336  1.00 46.77      A    C
ATOM   1233  CB  SER A 278     251.916 -74.202  98.517  1.00 42.80      A    C
ATOM   1234  OG  SER A 278     250.880 -74.139  97.565  1.00 54.88      A    O
ATOM   1235  C   SER A 278     252.200 -76.703  98.464  1.00 50.47      A    C
ATOM   1236  O   SER A 278     253.367 -77.084  98.378  1.00 54.17      A    O
ATOM   1237  N   VAL A 279     251.246 -77.347  97.819  1.00 51.50      A    N
ATOM   1238  CA  VAL A 279     251.566 -78.514  96.992  1.00 57.94      A    C
ATOM   1239  CB  VAL A 279     251.588 -79.780  97.847  1.00 44.98      A    C
ATOM   1240  CG1 VAL A 279     250.199 -80.321  97.997  1.00 43.31      A    C
ATOM   1241  CG2 VAL A 279     252.491 -80.787  97.178  1.00 57.04      A    C
ATOM   1242  C   VAL A 279     250.626 -78.680  95.765  1.00 59.15      A    C
ATOM   1243  O   VAL A 279     249.430 -78.387  95.867  1.00 67.05      A    O
ATOM   1244  N   HIS A 280     251.204 -79.094  94.615  1.00 63.81      A    N
ATOM   1245  CA  HIS A 280     250.486 -79.252  93.335  1.00 67.43      A    C
ATOM   1246  CB  HIS A 280     251.439 -79.066  92.122  1.00 66.79      A    C
ATOM   1247  CG  HIS A 280     250.875 -78.185  91.056  1.00 72.05      A    C
ATOM   1248  CD2 HIS A 280     250.729 -78.371  89.721  1.00 75.11      A    C
ATOM   1249  ND1 HIS A 280     250.404 -76.921  91.326  1.00 73.34      A    N
ATOM   1250  CE1 HIS A 280     249.997 -76.358  90.201  1.00 80.03      A    C
ATOM   1251  NE2 HIS A 280     250.185 -77.217  89.213  1.00 83.14      A    N
ATOM   1252  C   HIS A 280     249.968 -80.672  93.390  1.00 70.50      A    C
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ATOM   1253  O   HIS A 280     250.581 -81.589  92.745  1.00 82.51      A    O
ATOM   1254  N   ALA A 281     248.772 -80.853  93.985  1.00 68.02      A    N
ATOM   1255  CA  ALA A 281     248.427 -82.260  94.196  1.00 68.33      A    C
ATOM   1256  CB  ALA A 281     249.603 -82.885  94.806  1.00 60.98      A    C
ATOM   1257  C   ALA A 281     247.205 -82.754  95.016  1.00 68.64      A    C
ATOM   1258  O   ALA A 281     246.292 -82.032  95.339  1.00 67.99      A    O
ATOM   1259  N   PRO A 282     247.225 -84.034  95.373  1.00 70.43      A    N
ATOM   1260  CD  PRO A 282     246.861 -84.236  93.943  1.00 64.78      A    C
ATOM   1261  CA  PRO A 282     246.609 -85.171  96.058  1.00 67.06      A    C
ATOM   1262  CB  PRO A 282     246.654 -86.295  95.053  1.00 67.65      A    C
ATOM   1263  CG  PRO A 282     246.201 -85.826  93.934  1.00 63.34      A    C
ATOM   1264  C   PRO A 282     247.893 -85.384  96.902  1.00 69.62      A    C
ATOM   1265  O   PRO A 282     248.995 -85.628  96.346  1.00 80.00      A    O
ATOM   1266  N   SER A 283     247.878 -85.322  98.204  1.00 65.02      A    N
ATOM   1267  CA  SER A 283     249.163 -85.680  98.758  1.00 59.53      A    C
ATOM   1268  CB  SER A 283     250.127 -84.498  98.799  1.00 55.46      A    C
ATOM   1269  OG  SER A 283     250.750 -84.456 100.075  1.00 55.84      A    O
ATOM   1270  C   SER A 283     249.259 -86.394 100.033  1.00 55.99      A    C
ATOM   1271  O   SER A 283     248.283 -86.609 100.713  1.00 69.93      A    O
ATOM   1272  N   SER A 284     250.462 -86.835 100.323  1.00 60.56      A    N
ATOM   1273  CA  SER A 284     250.699 -87.467 101.588  1.00 63.49      A    C
ATOM   1274  CB  SER A 284     251.416 -88.808 101.438  1.00 63.76      A    C
ATOM   1275  OG  SER A 284     252.588 -88.697 100.633  1.00 77.24      A    O
ATOM   1276  C   SER A 284     251.609 -86.432 102.280  1.00 63.54      A    C
ATOM   1277  O   SER A 284     251.934 -85.336 101.744  1.00 57.98      A    O
ATOM   1278  N   ARG A 285     251.999 -86.775 103.492  1.00 64.16      A    N
ATOM   1279  CA  ARG A 285     252.823 -85.889 104.282  1.00 67.66      A    C
ATOM   1280  CB  ARG A 285     252.738 -86.301 105.734  1.00 62.91      A    C
ATOM   1281  C   ARG A 285     254.278 -85.923 103.806  1.00 68.61      A    C
ATOM   1282  O   ARG A 285     254.612 -86.645 102.888  1.00 72.84      A    O
ATOM   1283  N   ARG A 286     255.135 -85.146 104.466  1.00 71.24      A    N
ATOM   1284  CA  ARG A 286     256.561 -85.059 104.163  1.00 75.06      A    C
ATOM   1285  CB  ARG A 286     256.943 -83.563 104.008  1.00 73.44      A    C
ATOM   1286  CG  ARG A 286     255.881 -82.698 103.382  1.00 71.75      A    C
ATOM   1287  CD  ARG A 286     255.139 -83.449 102.361  1.00 72.37      A    C
ATOM   1288  NE  ARG A 286     255.481 -82.999 101.030  1.00 72.92      A    N
ATOM   1289  CZ  ARG A 286     254.690 -83.207  99.989  1.00 77.01      A    C
ATOM   1290  NH1 ARG A 286     253.537 -83.858 100.174  1.00 80.80      A    N
ATOM   1291  NH2 ARG A 286     255.024 -82.753  98.778  1.00 73.00      A    N
ATOM   1292  C   ARG A 286     257.251 -85.649 105.339  1.00 79.18      A    C
ATOM   1293  O   ARG A 286     258.525 -85.258 105.556  1.00 80.60      A    O
ATOM   1294  N   TPO A 287     256.458 -86.471 106.097  1.00 82.59      A    N
ATOM   1295  CA  TPO A 287     256.848 -87.091 107.376  1.00 81.36      A    C
ATOM   1296  CB  TPO A 287     258.340 -87.583 107.506  1.00 85.77      A    C
ATOM   1297  CG2 TPO A 287     258.788 -88.436 108.791  1.00 78.62      A    C
ATOM   1298  OG1 TPO A 287     259.242 -87.965 106.406  1.00 96.25      A    O
ATOM   1299  P   TPO A 287     259.671 -89.537 105.840  1.00 94.10      A    P
ATOM   1300  O1P TPO A 287     261.195 -89.889 106.372  1.00105.80      A    O
ATOM   1301  O2P TPO A 287     259.793 -89.485 104.142  1.00103.14      A    O
ATOM   1302  O3P TPO A 287     258.773 -90.552 106.786  1.00103.19      A    O
ATOM   1303  C   TPO A 287     257.020 -86.093 108.560  1.00 84.40      A    C
ATOM   1304  O   TPO A 287     256.708 -86.453 109.760  1.00 82.15      A    O
ATOM   1305  N   TPO A 288     257.164 -84.776 108.357  1.00 86.52      A    N
ATOM   1306  CA  TPO A 288     257.256 -84.113 109.592  1.00 85.55      A    C
ATOM   1307  CB  TPO A 288     258.562 -83.387 109.678  1.00 87.59      A    C
ATOM   1308  CG2 TPO A 288     259.265 -83.063 111.066  1.00 82.26      A    C
ATOM   1309  OG1 TPO A 288     259.687 -83.759 108.739  1.00 93.55      A    O
ATOM   1310  P   TPO A 288     261.048 -84.822 108.978  1.00 87.77      A    P
ATOM   1311  O1P TPO A 288     262.388 -83.892 109.216  1.00 91.79      A    O
ATOM   1312  O2P TPO A 288     261.352 -85.656 107.542  1.00 93.35      A    O
ATOM   1313  O3P TPO A 288     260.797 -85.456 110.481  1.00 95.16      A    O
ATOM   1314  C   TPO A 288     256.287 -82.985 109.892  1.00 89.28      A    C
ATOM   1315  O   TPO A 288     255.311 -82.594 109.048  1.00 86.14      A    O
ATOM   1316  N   LEU A 289     256.536 -82.411 111.055  1.00 87.01      A    N
ATOM   1317  CA  LEU A 289     255.511 -81.523 111.435  1.00 88.25      A    C
ATOM   1318  CB  LEU A 289     254.346 -82.345 111.883  1.00 78.91      A    C
ATOM   1319  C   LEU A 289     255.852 -80.565 112.436  1.00 87.34      A    C
ATOM   1320  O   LEU A 289     256.026 -80.894 113.634  1.00 90.27      A    O
ATOM   1321  N   CYS A 290     256.101 -79.389 111.914  1.00 89.51      A    N
ATOM   1322  CA  CYS A 290     256.347 -78.354 112.824  1.00 89.73      A    C
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ATOM   1323  CB  CYS A 290     257.299 -77.405 112.324  1.00 80.05      A    C
ATOM   1324  C   CYS A 290     254.931 -77.891 112.490  1.00 90.22      A    C
ATOM   1325  O   CYS A 290     254.405 -77.933 111.292  1.00 91.11      A    O
ATOM   1326  N   GLY A 291     254.262 -77.496 113.541  1.00 90.88      A    N
ATOM   1327  CA  GLY A 291     252.946 -77.026 113.294  1.00 84.36      A    C
ATOM   1328  C   GLY A 291     252.214 -77.175 114.559  1.00 80.67      A    C
ATOM   1329  O   GLY A 291     252.395 -78.093 115.381  1.00 72.19      A    O
ATOM   1330  N   THR A 292     251.411 -76.152 114.668  1.00 72.87      A    N
ATOM   1331  CA  THR A 292     250.543 -75.923 115.732  1.00 68.66      A    C
ATOM   1332  CB  THR A 292     250.229 -74.450 115.788  1.00 64.26      A    C
ATOM   1333  OG1 THR A 292     249.385 -74.238 116.907  1.00 62.83      A    O
ATOM   1334  CG2 THR A 292     249.511 -73.967 114.478  1.00 66.76      A    C
ATOM   1335  C   THR A 292     249.401 -76.698 115.093  1.00 69.67      A    C
ATOM   1336  O   THR A 292     248.736 -76.230 114.162  1.00 81.32      A    O
ATOM   1337  N   LEU A 293     249.162 -77.905 115.545  1.00 65.76      A    N
ATOM   1338  CA  LEU A 293     248.076 -78.633 114.929  1.00 57.85      A    C
ATOM   1339  CB  LEU A 293     247.775 -79.863 115.741  1.00 58.26      A    C
ATOM   1340  CG  LEU A 293     249.007 -80.649 116.175  1.00 59.75      A    C
ATOM   1341  CD1 LEU A 293     248.607 -81.606 117.246  1.00 56.85      A    C
ATOM   1342  CD2 LEU A 293     249.618 -81.397 114.982  1.00 55.33      A    C
ATOM   1343  C   LEU A 293     246.812 -77.819 114.737  1.00 54.37      A    C
ATOM   1344  O   LEU A 293     246.215 -77.930 113.686  1.00 59.11      A    O
ATOM   1345  N   ASP A 294     246.467 -76.947 115.687  1.00 45.72      A    N
ATOM   1346  CA  ASP A 294     245.241 -76.166 115.622  1.00 46.04      A    C
ATOM   1347  CB  ASP A 294     245.471 -74.762 116.195  1.00 47.18      A    C
ATOM   1348  CG  ASP A 294     245.754 -74.782 117.713  1.00 53.87      A    C
ATOM   1349  OD1 ASP A 294     244.938 -75.399 118.452  1.00 53.07      A    O
ATOM   1350  OD2 ASP A 294     246.772 -74.166 118.153  1.00 44.18      A    O
ATOM   1351  C   ASP A 294     244.490 -76.064 114.323  1.00 42.63      A    C
ATOM   1352  O   ASP A 294     243.322 -76.434 114.275  1.00 40.46      A    O
ATOM   1353  N   TYR A 295     245.168 -75.589 113.280  1.00 41.51      A    N
ATOM   1354  CA  TYR A 295     244.534 -75.404 111.983  1.00 42.29      A    C
ATOM   1355  CB  TYR A 295     245.046 -74.116 111.335  1.00 42.13      A    C
ATOM   1356  CG  TYR A 295     245.120 -72.945 112.263  1.00 41.89      A    C
ATOM   1357  CD1 TYR A 295     246.211 -72.793 113.099  1.00 47.14      A    C
ATOM   1358  CE1 TYR A 295     246.304 -71.731 113.973  1.00 47.33      A    C
ATOM   1359  CD2 TYR A 295     244.117 -71.995 112.309  1.00 36.13      A    C
ATOM   1360  CE2 TYR A 295     244.212 -70.914 113.162  1.00 43.23      A    C
ATOM   1361  CZ  TYR A 295     245.302 -70.785 113.996  1.00 47.19      A    C
ATOM   1362  OH  TYR A 295     245.414 -69.690 114.838  1.00 57.32      A    O
ATOM   1363  C   TYR A 295     244.655 -76.563 110.985  1.00 41.49      A    C
ATOM   1364  O   TYR A 295     244.224 -76.467 109.822  1.00 43.26      A    O
ATOM   1365  N   LEU A 296     245.228 -77.668 111.448  1.00 39.99      A    N
ATOM   1366  CA  LEU A 296     245.411 -78.868 110.607  1.00 51.39      A    C
ATOM   1367  CB  LEU A 296     246.671 -79.611 111.016  1.00 53.81      A    C
ATOM   1368  CG  LEU A 296     248.033 -78.987 110.652  1.00 57.41      A    C
ATOM   1369  CD1 LEU A 296     249.165 -79.934 111.025  1.00 51.84      A    C
ATOM   1370  CD2 LEU A 296     248.040 -78.694 109.161  1.00 50.59      A    C
ATOM   1371  C   LEU A 296     244.205 -79.803 110.651  1.00 48.90      A    C
ATOM   1372  O   LEU A 296     243.511 -79.890 111.645  1.00 60.00      A    O
ATOM   1373  N   PRO A 297     243.914 -80.480 109.550  1.00 49.64      A    N
ATOM   1374  CD  PRO A 297     244.428 -80.152 108.220  1.00 48.93      A    C
ATOM   1375  CA  PRO A 297     242.782 -81.390 109.447  1.00 53.31      A    C
ATOM   1376  CB  PRO A 297     242.450 -81.327 107.951  1.00 50.04      A    C
ATOM   1377  CG  PRO A 297     243.782 -81.194 107.367  1.00 48.93      A    C
ATOM   1378  C   PRO A 297     243.137 -82.762 109.966  1.00 57.23      A    C
ATOM   1379  O   PRO A 297     244.303 -83.109 110.051  1.00 56.18      A    O
ATOM   1380  N   PRO A 298     242.135 -83.562 110.334  1.00 59.72      A    N
ATOM   1381  CD  PRO A 298     240.704 -83.237 110.308  1.00 64.33      A    C
ATOM   1382  CA  PRO A 298     242.340 -84.917 110.853  1.00 62.61      A    C
ATOM   1383  CB  PRO A 298     240.929 -85.463 110.920  1.00 65.22      A    C
ATOM   1384  CG  PRO A 298     240.143 -84.267 111.288  1.00 64.88      A    C
ATOM   1385  C   PRO A 298     243.245 -85.779 109.963  1.00 64.63      A    C
ATOM   1386  O   PRO A 298     244.184 -86.426 110.459  1.00 56.23      A    O
ATOM   1387  N   GLU A 299     242.975 -85.781 108.656  1.00 60.03      A    N
ATOM   1388  CA  GLU A 299     243.778 -86.574 107.711  1.00 58.56      A    C
ATOM   1389  CB  GLU A 299     243.303 -86.339 106.265  1.00 57.01      A    C
ATOM   1390  CG  GLU A 299     243.028 -84.864 105.914  1.00 52.94      A    C
ATOM   1391  CD  GLU A 299     241.596 -84.474 106.109  1.00 48.80      A    C
ATOM   1392  OE1 GLU A 299     241.003 -84.897 107.126  1.00 47.74      A    O
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ATOM   1393  OE2 GLU A 299     241.075 -83.733 105.248  1.00 48.97      A    O
ATOM   1394  C   GLU A 299     245.279 -86.287 107.819  1.00 62.41      A    C
ATOM   1395  O   GLU A 299     246.094 -87.208 108.002  1.00 64.05      A    O
ATOM   1396  N   MET A 300     245.648 -85.014 107.709  1.00 63.79      A    N
ATOM   1397  CA  MET A 300     247.051 -84.637 107.816  1.00 63.71      A    C
ATOM   1398  CB  MET A 300     247.225 -83.145 107.597  1.00 67.63      A    C
ATOM   1399  CG  MET A 300     247.374 -82.763 106.145  1.00 66.70      A    C
ATOM   1400  SD  MET A 300     248.052 -81.127 106.017  1.00 71.20      A    S
ATOM   1401  CE  MET A 300     249.750 -81.388 106.380  1.00 69.10      A    C
ATOM   1402  C   MET A 300     247.661 -85.000 109.174  1.00 66.02      A    C
ATOM   1403  O   MET A 300     248.702 -85.664 109.256  1.00 70.05      A    O
ATOM   1404  N   ILE A 301     247.025 -84.550 110.244  1.00 67.53      A    N
ATOM   1405  CA  ILE A 301     247.504 -84.829 111.596  1.00 68.63      A    C
ATOM   1406  CB  ILE A 301     246.490 -84.278 112.606  1.00 67.77      A    C
ATOM   1407  CG2 ILE A 301     246.782 -84.750 113.995  1.00 61.97      A    C
ATOM   1408  CG1 ILE A 301     246.505 -82.750 112.495  1.00 67.98      A    C
ATOM   1409  CD1 ILE A 301     245.392 -82.041 113.240  1.00 76.63      A    C
ATOM   1410  C   ILE A 301     247.769 -86.319 111.812  1.00 73.57      A    C
ATOM   1411  O   ILE A 301     248.662 -86.676 112.588  1.00 78.37      A    O
ATOM   1412  N   GLU A 302     247.034 -87.184 111.092  1.00 75.18      A    N
ATOM   1413  CA  GLU A 302     247.212 -88.639 111.215  1.00 74.73      A    C
ATOM   1414  CB  GLU A 302     245.845 -89.306 111.428  1.00 70.49      A    C
ATOM   1415  CG  GLU A 302     245.378 -89.254 112.936  1.00 78.38      A    C
ATOM   1416  CD  GLU A 302     243.861 -89.396 113.127  1.00 79.55      A    C
ATOM   1417  OE1 GLU A 302     243.188 -90.062 112.281  1.00 80.35      A    O
ATOM   1418  OE2 GLU A 302     243.360 -88.836 114.140  1.00 87.62      A    O
ATOM   1419  C   GLU A 302     248.026 -89.290 110.065  1.00 75.98      A    C
ATOM   1420  O   GLU A 302     248.411 -90.458 110.160  1.00 81.76      A    O
ATOM   1421  N   GLY A 303     248.339 -88.531 109.006  1.00 78.40      A    N
ATOM   1422  CA  GLY A 303     249.160 -89.053 107.912  1.00 72.91      A    C
ATOM   1423  C   GLY A 303     248.566 -89.374 106.552  1.00 72.79      A    C
ATOM   1424  O   GLY A 303     249.237 -89.368 105.513  1.00 76.85      A    O
ATOM   1425  N   ARG A 304     247.286 -89.679 106.549  1.00 67.34      A    N
ATOM   1426  CA  ARG A 304     246.623 -90.043 105.300  1.00 63.57      A    C
ATOM   1427  CB  ARG A 304     245.098 -90.120 105.461  1.00 62.11      A    C
ATOM   1428  CG  ARG A 304     244.623 -91.200 106.414  1.00 63.49      A    C
ATOM   1429  CD  ARG A 304     243.198 -90.950 106.857  1.00 70.18      A    C
ATOM   1430  NE  ARG A 304     243.087 -89.787 107.759  1.00 79.24      A    N
ATOM   1431  CZ  ARG A 304     242.896 -89.857 109.080  1.00 78.33      A    C
ATOM   1432  NH1 ARG A 304     242.788 -91.031 109.665  1.00 78.68      A    N
ATOM   1433  NH2 ARG A 304     242.819 -88.757 109.821  1.00 83.87      A    N
ATOM   1434  C   ARG A 304     246.882 -89.200 104.087  1.00 60.49      A    C
ATOM   1435  O   ARG A 304     247.550 -88.195 104.122  1.00 65.51      A    O
ATOM   1436  N   MET A 305     246.278 -89.661 103.013  1.00 61.50      A    N
ATOM   1437  CA  MET A 305     246.335 -89.084 101.698  1.00 65.46      A    C
ATOM   1438  CB  MET A 305     246.041 -90.197 100.663  1.00 63.39      A    C
ATOM   1439  C   MET A 305     245.233 -88.042 101.699  1.00 69.37      A    C
ATOM   1440  O   MET A 305     244.036 -88.349 101.691  1.00 78.96      A    O
ATOM   1441  N   HIS A 306     245.671 -86.802 101.710  1.00 69.56      A    N
ATOM   1442  CA  HIS A 306     244.790 -85.674 101.706  1.00 64.25      A    C
ATOM   1443  CB  HIS A 306     245.247 -84.657 102.735  1.00 64.47      A    C
ATOM   1444  CG  HIS A 306     246.674 -84.276 102.611  1.00 58.72      A    C
ATOM   1445  CD2 HIS A 306     247.253 -83.167 102.099  1.00 56.35      A    C
ATOM   1446  ND1 HIS A 306     247.691 -85.072 103.092  1.00 58.38      A    N
ATOM   1447  CE1 HIS A 306     248.841 -84.461 102.883  1.00 55.77      A    C
ATOM   1448  NE2 HIS A 306     248.602 -83.307 102.284  1.00 54.24      A    N
ATOM   1449  C   HIS A 306     244.657 -85.001 100.363  1.00 64.13      A    C
ATOM   1450  O   HIS A 306     245.469 -85.186  99.467  1.00 61.51      A    O
ATOM   1451  N   ASP A 307     243.667 -84.122 100.305  1.00 66.29      A    N
ATOM   1452  CA  ASP A 307     243.316 -83.353  99.117  1.00 67.53      A    C
ATOM   1453  CB  ASP A 307     241.988 -83.886  98.618  1.00 76.36      A    C
ATOM   1454  CG  ASP A 307     241.022 -84.130  99.789  1.00 82.91      A    C
ATOM   1455  OD1 ASP A 307     240.938 -83.232 100.665  1.00 87.78      A    O
ATOM   1456  OD2 ASP A 307     240.376 -85.208  99.863  1.00 84.54      A    O
ATOM   1457  C   ASP A 307     243.130 -81.873  99.495  1.00 62.06      A    C
ATOM   1458  O   ASP A 307     243.430 -81.435 100.603  1.00 62.07      A    O
ATOM   1459  N   GLU A 308     242.537 -81.150  98.566  1.00 56.29      A    N
ATOM   1460  CA  GLU A 308     242.256 -79.740  98.709  1.00 59.89      A    C
ATOM   1461  CB  GLU A 308     241.830 -79.236  97.325  1.00 58.22      A    C
ATOM   1462  CG  GLU A 308     241.947 -80.428  96.353  1.00 63.76      A    C
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ATOM   1463  CD  GLU A 308     241.729 -80.087  94.898  1.00 66.66      A    C
ATOM   1464  OE1 GLU A 308     242.570 -79.367  94.305  1.00 69.11      A    O
ATOM   1465  OE2 GLU A 308     240.722 -80.565  94.330  1.00 69.49      A    O
ATOM   1466  C   GLU A 308     241.201 -79.444  99.802  1.00 56.96      A    C
ATOM   1467  O   GLU A 308     241.003 -78.286 100.226  1.00 57.79      A    O
ATOM   1468  N   LYS A 309     240.558 -80.495 100.296  1.00 54.61      A    N
ATOM   1469  CA  LYS A 309     239.526 -80.332 101.317  1.00 54.70      A    C
ATOM   1470  CB  LYS A 309     238.697 -81.615 101.449  1.00 46.40      A    C
ATOM   1471  CG  LYS A 309     237.740 -81.859 100.300  1.00 53.44      A    C
ATOM   1472  CD  LYS A 309     236.674 -80.778 100.253  1.00 58.61      A    C
ATOM   1473  CE  LYS A 309     235.600 -81.071  99.214  1.00 60.43      A    C
ATOM   1474  NZ  LYS A 309     234.524 -80.026  99.209  1.00 60.76      A    N
ATOM   1475  C   LYS A 309     240.111 -79.967 102.668  1.00 54.64      A    C
ATOM   1476  O   LYS A 309     239.366 -79.724 103.618  1.00 66.35      A    O
ATOM   1477  N   VAL A 310     241.439 -79.941 102.770  1.00 57.91      A    N
ATOM   1478  CA  VAL A 310     242.086 -79.593 104.039  1.00 53.66      A    C
ATOM   1479  CB  VAL A 310     243.573 -79.974 104.058  1.00 52.18      A    C
ATOM   1480  CG1 VAL A 310     243.749 -81.375 103.528  1.00 54.98      A    C
ATOM   1481  CG2 VAL A 310     244.347 -79.010 103.252  1.00 55.72      A    C
ATOM   1482  C   VAL A 310     241.957 -78.091 104.263  1.00 53.64      A    C
ATOM   1483  O   VAL A 310     241.771 -77.638 105.404  1.00 47.54      A    O
ATOM   1484  N   ASP A 311     242.008 -77.332 103.168  1.00 50.01      A    N
ATOM   1485  CA  ASP A 311     241.881 -75.889 103.255  1.00 57.45      A    C
ATOM   1486  CB  ASP A 311     242.275 -75.232 101.925  1.00 56.10      A    C
ATOM   1487  CG  ASP A 311     243.756 -75.367 101.624  1.00 55.84      A    C
ATOM   1488  OD1 ASP A 311     244.585 -75.238 102.553  1.00 49.03      A    O
ATOM   1489  OD2 ASP A 311     244.085 -75.597 100.453  1.00 54.46      A    O
ATOM   1490  C   ASP A 311     240.454 -75.467 103.667  1.00 59.07      A    C
ATOM   1491  O   ASP A 311     240.258 -74.365 104.208  1.00 69.75      A    O
ATOM   1492  N   LEU A 312     239.471 -76.343 103.445  1.00 56.37      A    N
ATOM   1493  CA  LEU A 312     238.117 -76.031 103.815  1.00 45.08      A    C
ATOM   1494  CB  LEU A 312     237.135 -76.975 103.126  1.00 46.93      A    C
ATOM   1495  CG  LEU A 312     236.719 -76.481 101.746  1.00 45.65      A    C
ATOM   1496  CD1 LEU A 312     236.262 -77.698 100.966  1.00 57.08      A    C
ATOM   1497  CD2 LEU A 312     235.607 -75.431 101.878  1.00 42.14      A    C
ATOM   1498  C   LEU A 312     238.066 -76.204 105.309  1.00 42.72      A    C
ATOM   1499  O   LEU A 312     237.357 -75.451 105.986  1.00 41.50      A    O
ATOM   1500  N   TRP A 313     238.778 -77.211 105.814  1.00 35.13      A    N
ATOM   1501  CA  TRP A 313     238.818 -77.454 107.257  1.00 42.05      A    C
ATOM   1502  CB  TRP A 313     239.630 -78.718 107.532  1.00 37.59      A    C
ATOM   1503  CG  TRP A 313     239.903 -78.960 108.973  1.00 37.21      A    C
ATOM   1504  CD2 TRP A 313     239.169 -79.815 109.859  1.00 38.09      A    C
ATOM   1505  CE2 TRP A 313     239.786 -79.742 111.133  1.00 40.55      A    C
ATOM   1506  CE3 TRP A 313     238.050 -80.627 109.706  1.00 42.38      A    C
ATOM   1507  CD1 TRP A 313     240.895 -78.418 109.716  1.00 40.67      A    C
ATOM   1508  NE1 TRP A 313     240.843 -78.885 111.022  1.00 36.83      A    N
ATOM   1509  CZ2 TRP A 313     239.325 -80.470 112.237  1.00 41.12      A    C
ATOM   1510  CZ3 TRP A 313     237.591 -81.353 110.817  1.00 40.98      A    C
ATOM   1511  CH2 TRP A 313     238.220 -81.265 112.052  1.00 42.79      A    C
ATOM   1512  C   TRP A 313     239.448 -76.259 108.009  1.00 45.03      A    C
ATOM   1513  O   TRP A 313     238.971 -75.813 109.044  1.00 49.94      A    O
ATOM   1514  N   SER A 314     240.543 -75.748 107.477  1.00 46.02      A    N
ATOM   1515  CA  SER A 314     241.220 -74.624 108.087  1.00 41.93      A    C
ATOM   1516  CB  SER A 314     242.523 -74.354 107.341  1.00 44.32      A    C
ATOM   1517  OG  SER A 314     243.333 -75.505 107.387  1.00 38.93      A    O
ATOM   1518  C   SER A 314     240.338 -73.392 108.062  1.00 39.99      A    C
ATOM   1519  O   SER A 314     240.328 -72.596 109.011  1.00 45.37      A    O
ATOM   1520  N   LEU A 315     239.616 -73.226 106.965  1.00 35.87      A    N
ATOM   1521  CA  LEU A 315     238.704 -72.091 106.805  1.00 35.10      A    C
ATOM   1522  CB  LEU A 315     238.115 -72.091 105.390  1.00 34.40      A    C
ATOM   1523  CG  LEU A 315     237.307 -70.872 104.991  1.00 41.64      A    C
ATOM   1524  CD1 LEU A 315     238.136 -69.564 105.204  1.00 42.79      A    C
ATOM   1525  CD2 LEU A 315     236.927 -71.022 103.523  1.00 40.03      A    C
ATOM   1526  C   LEU A 315     237.569 -72.154 107.851  1.00 38.86      A    C
ATOM   1527  O   LEU A 315     236.854 -71.200 108.035  1.00 42.90      A    O
ATOM   1528  N   GLY A 316     237.421 -73.301 108.515  1.00 40.90      A    N
ATOM   1529  CA  GLY A 316     236.420 -73.475 109.540  1.00 29.38      A    C
ATOM   1530  C   GLY A 316     237.051 -73.072 110.863  1.00 38.31      A    C
ATOM   1531  O   GLY A 316     236.444 -72.317 111.644  1.00 44.99      A    O
ATOM   1532  N   VAL A 317     238.259 -73.578 111.126  1.00 34.77      A    N
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ATOM   1533  CA  VAL A 317     238.980 -73.253 112.343  1.00 38.52      A    C
ATOM   1534  CB  VAL A 317     240.378 -73.903 112.348  1.00 39.35      A    C
ATOM   1535  CG1 VAL A 317     241.200 -73.322 113.465  1.00 39.07      A    C
ATOM   1536  CG2 VAL A 317     240.268 -75.403 112.500  1.00 36.59      A    C
ATOM   1537  C   VAL A 317     239.145 -71.743 112.382  1.00 39.43      A    C
ATOM   1538  O   VAL A 317     238.923 -71.092 113.421  1.00 39.97      A    O
ATOM   1539  N   LEU A 318     239.517 -71.195 111.226  1.00 35.94      A    N
ATOM   1540  CA  LEU A 318     239.728 -69.769 111.107  1.00 35.49      A    C
ATOM   1541  CB  LEU A 318     240.217 -69.443 109.701  1.00 34.72      A    C
ATOM   1542  CG  LEU A 318     241.505 -68.678 109.594  1.00 35.85      A    C
ATOM   1543  CD1 LEU A 318     242.492 -69.129 110.631  1.00 35.87      A    C
ATOM   1544  CD2 LEU A 318     242.040 -68.906 108.254  1.00 39.24      A    C
ATOM   1545  C   LEU A 318     238.440 -68.952 111.425  1.00 41.79      A    C
ATOM   1546  O   LEU A 318     238.499 -67.943 112.191  1.00 36.26      A    O
ATOM   1547  N   CYS A 319     237.301 -69.398 110.858  1.00 35.62      A    N
ATOM   1548  CA  CYS A 319     236.053 -68.700 111.024  1.00 40.61      A    C
ATOM   1549  CB  CYS A 319     235.013 -69.338 110.158  1.00 35.35      A    C
ATOM   1550  SG  CYS A 319     233.324 -68.489 110.215  1.00 25.40      A    S
ATOM   1551  C   CYS A 319     235.640 -68.734 112.482  1.00 35.51      A    C
ATOM   1552  O   CYS A 319     235.027 -67.810 112.980  1.00 40.27      A    O
ATOM   1553  N   TYR A 320     236.009 -69.795 113.182  1.00 38.46      A    N
ATOM   1554  CA  TYR A 320     235.683 -69.942 114.604  1.00 39.25      A    C
ATOM   1555  CB  TYR A 320     235.867 -71.406 115.016  1.00 37.24      A    C
ATOM   1556  CG  TYR A 320     235.634 -71.683 116.479  1.00 38.04      A    C
ATOM   1557  CD1 TYR A 320     236.573 -71.333 117.438  1.00 34.91      A    C
ATOM   1558  CE1 TYR A 320     236.380 -71.640 118.800  1.00 31.79      A    C
ATOM   1559  CD2 TYR A 320     234.484 -72.331 116.892  1.00 39.29      A    C
ATOM   1560  CE2 TYR A 320     234.248 -72.628 118.233  1.00 35.49      A    C
ATOM   1561  CZ  TYR A 320     235.191 -72.289 119.198  1.00 41.97      A    C
ATOM   1562  OH  TYR A 320     234.905 -72.575 120.532  1.00 35.00      A    O
ATOM   1563  C   TYR A 320     236.613 -69.038 115.435  1.00 43.31      A    C
ATOM   1564  O   TYR A 320     236.166 -68.318 116.322  1.00 51.83      A    O
ATOM   1565  N   GLU A 321     237.910 -69.073 115.144  1.00 42.04      A    N
ATOM   1566  CA  GLU A 321     238.860 -68.249 115.871  1.00 43.24      A    C
ATOM   1567  CB  GLU A 321     240.273 -68.552 115.419  1.00 36.62      A    C
ATOM   1568  CG  GLU A 321     241.311 -67.733 116.144  1.00 43.20      A    C
ATOM   1569  CD  GLU A 321     242.689 -68.087 115.740  1.00 47.61      A    C
ATOM   1570  OE1 GLU A 321     242.845 -69.101 115.003  1.00 49.19      A    O
ATOM   1571  OE2 GLU A 321     243.606 -67.350 116.171  1.00 55.54      A    O
ATOM   1572  C   GLU A 321     238.569 -66.763 115.714  1.00 42.47      A    C
ATOM   1573  O   GLU A 321     238.794 -65.970 116.656  1.00 48.77      A    O
ATOM   1574  N   PHE A 322     238.073 -66.377 114.539  1.00 40.79      A    N
ATOM   1575  CA  PHE A 322     237.728 -64.970 114.299  1.00 37.96      A    C
ATOM   1576  CB  PHE A 322     237.361 -64.737 112.846  1.00 37.47      A    C
ATOM   1577  CG  PHE A 322     238.517 -64.880 111.892  1.00 39.59      A    C
ATOM   1578  CD1 PHE A 322     239.839 -64.729 112.338  1.00 34.97      A    C
ATOM   1579  CD2 PHE A 322     238.279 -65.133 110.515  1.00 41.97      A    C
ATOM   1580  CE1 PHE A 322     240.892 -64.830 111.441  1.00 36.15      A    C
ATOM   1581  CE2 PHE A 322     239.342 -65.232 109.605  1.00 35.10      A    C
ATOM   1582  CZ  PHE A 322     240.649 -65.081 110.070  1.00 38.47      A    C
ATOM   1583  C   PHE A 322     236.569 -64.466 115.166  1.00 40.06      A    C
ATOM   1584  O   PHE A 322     236.542 -63.305 115.532  1.00 37.07      A    O
ATOM   1585  N   LEU A 323     235.636 -65.356 115.499  1.00 34.80      A    N
ATOM   1586  CA  LEU A 323     234.484 -65.021 116.291  1.00 30.32      A    C
ATOM   1587  CB  LEU A 323     233.317 -65.873 115.774  1.00 28.53      A    C
ATOM   1588  CG  LEU A 323     232.935 -65.689 114.325  1.00 29.77      A    C
ATOM   1589  CD1 LEU A 323     231.967 -66.804 113.984  1.00 24.59      A    C
ATOM   1590  CD2 LEU A 323     232.306 -64.288 114.046  1.00 30.36      A    C
ATOM   1591  C   LEU A 323     234.661 -65.226 117.824  1.00 40.81      A    C
ATOM   1592  O   LEU A 323     234.058 -64.495 118.618  1.00 36.74      A    O
ATOM   1593  N   VAL A 324     235.435 -66.247 118.216  1.00 38.37      A    N
ATOM   1594  CA  VAL A 324     235.629 -66.590 119.612  1.00 35.74      A    C
ATOM   1595  CB  VAL A 324     235.648 -68.102 119.816  1.00 37.17      A    C
ATOM   1596  CG1 VAL A 324     235.879 -68.419 121.294  1.00 34.96      A    C
ATOM   1597  CG2 VAL A 324     234.352 -68.697 119.303  1.00 26.08      A    C
ATOM   1598  C   VAL A 324     236.903 -66.012 120.154  1.00 35.95      A    C
ATOM   1599  O   VAL A 324     236.947 -65.631 121.301  1.00 44.11      A    O
ATOM   1600  N   GLY A 325     237.936 -65.929 119.330  1.00 41.01      A    N
ATOM   1601  CA  GLY A 325     239.198 -65.355 119.782  1.00 39.51      A    C
ATOM   1602  C   GLY A 325     240.283 -66.402 119.960  1.00 44.55      A    C
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ATOM   1603  O   GLY A 325     241.414 -66.092 120.321  1.00 38.22      A    O
ATOM   1604  N   LYS A 326     239.929 -67.663 119.722  1.00 45.05      A    N
ATOM   1605  CA  LYS A 326     240.881 -68.764 119.861  1.00 45.42      A    C
ATOM   1606  CB  LYS A 326     240.994 -69.180 121.325  1.00 52.62      A    C
ATOM   1607  CG  LYS A 326     239.699 -69.600 121.927  1.00 55.78      A    C
ATOM   1608  CD  LYS A 326     239.856 -69.912 123.415  1.00 60.70      A    C
ATOM   1609  CE  LYS A 326     238.486 -70.233 124.058  1.00 66.17      A    C
ATOM   1610  NZ  LYS A 326     238.569 -70.651 125.479  1.00 62.77      A    N
ATOM   1611  C   LYS A 326     240.419 -69.937 119.005  1.00 46.11      A    C
ATOM   1612  O   LYS A 326     239.259 -70.074 118.767  1.00 39.63      A    O
ATOM   1613  N   PRO A 327     241.336 -70.820 118.568  1.00 53.36      A    N
ATOM   1614  CD  PRO A 327     242.773 -70.850 118.901  1.00 43.78      A    C
ATOM   1615  CA  PRO A 327     240.980 -71.968 117.726  1.00 41.74      A    C
ATOM   1616  CB  PRO A 327     242.331 -72.631 117.446  1.00 38.86      A    C
ATOM   1617  CG  PRO A 327     243.349 -71.561 117.738  1.00 42.00      A    C
ATOM   1618  C   PRO A 327     240.064 -72.895 118.474  1.00 40.42      A    C
ATOM   1619  O   PRO A 327     240.166 -73.021 119.700  1.00 46.66      A    O
ATOM   1620  N   PRO A 328     239.209 -73.624 117.743  1.00 40.91      A    N
ATOM   1621  CD  PRO A 328     239.083 -73.540 116.278  1.00 35.93      A    C
ATOM   1622  CA  PRO A 328     238.232 -74.572 118.297  1.00 43.34      A    C
ATOM   1623  CB  PRO A 328     237.340 -74.900 117.106  1.00 40.94      A    C
ATOM   1624  CG  PRO A 328     238.298 -74.799 115.948  1.00 38.83      A    C
ATOM   1625  C   PRO A 328     238.785 -75.820 118.933  1.00 44.48      A    C
ATOM   1626  O   PRO A 328     238.075 -76.507 119.657  1.00 56.46      A    O
ATOM   1627  N   PHE A 329     240.053 -76.118 118.674  1.00 50.25      A    N
ATOM   1628  CA  PHE A 329     240.691 -77.334 119.223  1.00 45.46      A    C
ATOM   1629  CB  PHE A 329     241.119 -78.268 118.089  1.00 42.34      A    C
ATOM   1630  CG  PHE A 329     240.026 -78.559 117.139  1.00 42.28      A    C
ATOM   1631  CD1 PHE A 329     238.895 -79.252 117.575  1.00 39.79      A    C
ATOM   1632  CD2 PHE A 329     240.097 -78.138 115.808  1.00 39.80      A    C
ATOM   1633  CE1 PHE A 329     237.824 -79.529 116.665  1.00 42.28      A    C
ATOM   1634  CE2 PHE A 329     239.034 -78.408 114.902  1.00 45.87      A    C
ATOM   1635  CZ  PHE A 329     237.903 -79.106 115.332  1.00 40.12      A    C
ATOM   1636  C   PHE A 329     241.904 -76.978 120.064  1.00 45.73      A    C
ATOM   1637  O   PHE A 329     242.769 -77.808 120.277  1.00 40.30      A    O
ATOM   1638  N   GLU A 330     241.958 -75.741 120.543  1.00 44.00      A    N
ATOM   1639  CA  GLU A 330     243.070 -75.285 121.345  1.00 50.19      A    C
ATOM   1640  CB  GLU A 330     242.855 -73.844 121.787  1.00 54.34      A    C
ATOM   1641  CG  GLU A 330     244.140 -73.087 122.035  1.00 65.74      A    C
ATOM   1642  CD  GLU A 330     243.932 -71.802 122.845  1.00 74.00      A    C
ATOM   1643  OE1 GLU A 330     244.822 -70.906 122.794  1.00 80.13      A    O
ATOM   1644  OE2 GLU A 330     242.884 -71.701 123.543  1.00 77.27      A    O
ATOM   1645  C   GLU A 330     243.172 -76.161 122.550  1.00 51.87      A    C
ATOM   1646  O   GLU A 330     242.158 -76.668 123.029  1.00 54.61      A    O
ATOM   1647  N   ALA A 331     244.404 -76.359 123.020  1.00 56.85      A    N
ATOM   1648  CA  ALA A 331     244.680 -77.163 124.217  1.00 60.04      A    C
ATOM   1649  CB  ALA A 331     244.791 -78.618 123.872  1.00 51.13      A    C
ATOM   1650  C   ALA A 331     245.992 -76.676 124.795  1.00 60.84      A    C
ATOM   1651  O   ALA A 331     246.630 -75.805 124.208  1.00 69.22      A    O
ATOM   1652  N   ASN A 332     246.378 -77.197 125.962  1.00 64.86      A    N
ATOM   1653  CA  ASN A 332     247.637 -76.790 126.560  1.00 61.08      A    C
ATOM   1654  CB  ASN A 332     247.514 -76.742 128.100  1.00 60.00      A    C
ATOM   1655  CG  ASN A 332     246.822 -75.435 128.611  1.00 67.42      A    C
ATOM   1656  OD1 ASN A 332     247.429 -74.359 128.654  1.00 68.56      A    O
ATOM   1657  ND2 ASN A 332     245.547 -75.544 129.000  1.00 72.60      A    N
ATOM   1658  C   ASN A 332     248.807 -77.666 126.080  1.00 60.05      A    C
ATOM   1659  O   ASN A 332     249.966 -77.257 126.234  1.00 65.40      A    O
ATOM   1660  N   THR A 333     248.512 -78.823 125.460  1.00 53.02      A    N
ATOM   1661  CA  THR A 333     249.562 -79.745 124.976  1.00 54.16      A    C
ATOM   1662  CB  THR A 333     249.652 -81.103 125.782  1.00 55.23      A    C
ATOM   1663  OG1 THR A 333     248.822 -82.111 125.160  1.00 53.00      A    O
ATOM   1664  CG2 THR A 333     249.296 -80.907 127.225  1.00 55.86      A    C
ATOM   1665  C   THR A 333     249.400 -80.153 123.497  1.00 59.22      A    C
ATOM   1666  O   THR A 333     248.379 -79.845 122.897  1.00 59.44      A    O
ATOM   1667  N   TYR A 334     250.358 -80.901 122.930  1.00 66.35      A    N
ATOM   1668  CA  TYR A 334     250.331 -81.305 121.506  1.00 67.76      A    C
ATOM   1669  CB  TYR A 334     251.770 -81.458 120.999  1.00 65.59      A    C
ATOM   1670  CG  TYR A 334     251.922 -82.193 119.636  1.00 60.98      A    C
ATOM   1671  CD1 TYR A 334     252.369 -81.519 118.539  1.00 58.37      A    C
ATOM   1672  CE1 TYR A 334     252.454 -82.152 117.323  1.00 57.12      A    C
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ATOM   1673  CD2 TYR A 334     251.556 -83.561 119.454  1.00 60.46      A    C
ATOM   1674  CE2 TYR A 334     251.612 -84.203 118.235  1.00 54.51      A    C
ATOM   1675  CZ  TYR A 334     252.081 -83.483 117.170  1.00 61.53      A    C
ATOM   1676  OH  TYR A 334     252.259 -84.054 115.932  1.00 64.63      A    O
ATOM   1677  C   TYR A 334     249.706 -82.673 121.408  1.00 72.76      A    C
ATOM   1678  O   TYR A 334     249.561 -83.257 120.347  1.00 80.80      A    O
ATOM   1679  N   GLN A 335     249.281 -83.198 122.511  1.00 75.82      A    N
ATOM   1680  CA  GLN A 335     248.849 -84.550 122.438  1.00 75.10      A    C
ATOM   1681  CB  GLN A 335     249.822 -85.260 123.381  1.00 74.39      A    C
ATOM   1682  CG  GLN A 335     251.326 -84.889 123.021  1.00 71.11      A    C
ATOM   1683  CD  GLN A 335     252.200 -84.301 124.134  1.00 70.17      A    C
ATOM   1684  OE1 GLN A 335     253.434 -84.204 123.959  1.00 71.56      A    O
ATOM   1685  NE2 GLN A 335     251.605 -83.897 125.269  1.00 67.14      A    N
ATOM   1686  C   GLN A 335     247.415 -84.426 122.926  1.00 72.12      A    C
ATOM   1687  O   GLN A 335     246.584 -85.314 122.698  1.00 70.11      A    O
ATOM   1688  N   GLU A 336     247.129 -83.272 123.527  1.00 67.17      A    N
ATOM   1689  CA  GLU A 336     245.815 -82.981 124.050  1.00 66.23      A    C
ATOM   1690  CB  GLU A 336     245.911 -81.929 125.131  1.00 54.23      A    C
ATOM   1691  C   GLU A 336     245.132 -82.389 122.779  1.00 63.60      A    C
ATOM   1692  O   GLU A 336     243.998 -82.726 122.478  1.00 68.92      A    O
ATOM   1693  N   THR A 337     245.807 -81.474 122.060  1.00 63.51      A    N
ATOM   1694  CA  THR A 337     245.246 -80.840 120.863  1.00 45.32      A    C
ATOM   1695  CB  THR A 337     246.221 -79.805 120.292  1.00 48.60      A    C
ATOM   1696  OG1 THR A 337     246.433 -78.730 121.227  1.00 44.49      A    O
ATOM   1697  CG2 THR A 337     245.691 -79.262 118.948  1.00 33.80      A    C
ATOM   1698  C   THR A 337     245.031 -81.916 119.825  1.00 55.74      A    C
ATOM   1699  O   THR A 337     244.036 -81.911 119.094  1.00 53.43      A    O
ATOM   1700  N   TYR A 338     245.979 -82.848 119.758  1.00 62.69      A    N
ATOM   1701  CA  TYR A 338     245.902 -83.948 118.795  1.00 62.09      A    C
ATOM   1702  CB  TYR A 338     247.056 -84.923 119.028  1.00 70.33      A    C
ATOM   1703  CG  TYR A 338     247.098 -86.080 118.034  1.00 74.69      A    C
ATOM   1704  CD1 TYR A 338     248.041 -86.116 117.016  1.00 72.79      A    C
ATOM   1705  CE1 TYR A 338     248.050 -87.154 116.101  1.00 75.92      A    C
ATOM   1706  CD2 TYR A 338     246.167 -87.121 118.096  1.00 70.94      A    C
ATOM   1707  CE2 TYR A 338     246.167 -88.153 117.173  1.00 73.14      A    C
ATOM   1708  CZ  TYR A 338     247.102 -88.168 116.186  1.00 73.24      A    C
ATOM   1709  OH  TYR A 338     247.091 -89.196 115.273  1.00 74.46      A    O
ATOM   1710  C   TYR A 338     244.586 -84.698 118.971  1.00 62.03      A    C
ATOM   1711  O   TYR A 338     243.884 -85.017 117.982  1.00 52.46      A    O
ATOM   1712  N   LYS A 339     244.267 -84.991 120.242  1.00 58.53      A    N
ATOM   1713  CA  LYS A 339     243.048 -85.733 120.587  1.00 51.87      A    C
ATOM   1714  CB  LYS A 339     243.020 -86.042 122.063  1.00 52.84      A    C
ATOM   1715  C   LYS A 339     241.791 -84.990 120.165  1.00 50.97      A    C
ATOM   1716  O   LYS A 339     240.975 -85.531 119.412  1.00 50.87      A    O
ATOM   1717  N   ARG A 340     241.675 -83.725 120.575  1.00 44.05      A    N
ATOM   1718  CA  ARG A 340     240.507 -82.938 120.230  1.00 47.22      A    C
ATOM   1719  CB  ARG A 340     240.532 -81.574 120.904  1.00 45.76      A    C
ATOM   1720  CG  ARG A 340     240.286 -81.607 122.398  1.00 52.85      A    C
ATOM   1721  CD  ARG A 340     240.241 -80.202 122.999  1.00 59.79      A    C
ATOM   1722  NE  ARG A 340     239.045 -79.491 122.535  1.00 67.64      A    N
ATOM   1723  CZ  ARG A 340     238.843 -78.186 122.672  1.00 65.86      A    C
ATOM   1724  NH1 ARG A 340     239.763 -77.446 123.254  1.00 67.71      A    N
ATOM   1725  NH2 ARG A 340     237.722 -77.631 122.240  1.00 68.60      A    N
ATOM   1726  C   ARG A 340     240.299 -82.765 118.738  1.00 46.20      A    C
ATOM   1727  O   ARG A 340     239.144 -82.785 118.274  1.00 48.74      A    O
ATOM   1728  N   ILE A 341     241.387 -82.597 117.979  1.00 47.52      A    N
ATOM   1729  CA  ILE A 341     241.253 -82.462 116.511  1.00 49.01      A    C
ATOM   1730  CB  ILE A 341     242.586 -82.067 115.787  1.00 48.35      A    C
ATOM   1731  CG2 ILE A 341     242.367 -82.130 114.290  1.00 34.18      A    C
ATOM   1732  CG1 ILE A 341     243.053 -80.674 116.236  1.00 44.80      A    C
ATOM   1733  CD1 ILE A 341     244.317 -80.259 115.592  1.00 47.34      A    C
ATOM   1734  C   ILE A 341     240.783 -83.752 115.851  1.00 53.55      A    C
ATOM   1735  O   ILE A 341     239.936 -83.734 114.948  1.00 44.79      A    O
ATOM   1736  N   SER A 342     241.369 -84.867 116.286  1.00 59.31      A    N
ATOM   1737  CA  SER A 342     241.014 -86.175 115.743  1.00 65.95      A    C
ATOM   1738  CB  SER A 342     242.037 -87.227 116.158  1.00 66.33      A    C
ATOM   1739  OG  SER A 342     241.613 -88.516 115.745  1.00 63.35      A    O
ATOM   1740  C   SER A 342     239.628 -86.604 116.202  1.00 65.99      A    C
ATOM   1741  O   SER A 342     238.941 -87.327 115.475  1.00 61.18      A    O
ATOM   1742  N   ARG A 343     239.232 -86.162 117.400  1.00 61.34      A    N
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ATOM   1743  CA  ARG A 343     237.910 -86.478 117.932  1.00 59.46      A    C
ATOM   1744  CB  ARG A 343     237.888 -86.410 119.456  1.00 58.77      A    C
ATOM   1745  CG  ARG A 343     238.466 -87.604 120.201  1.00 47.50      A    C
ATOM   1746  CD  ARG A 343     238.360 -87.314 121.675  1.00 60.64      A    C
ATOM   1747  NE  ARG A 343     238.972 -88.327 122.530  1.00 66.55      A    N
ATOM   1748  CZ  ARG A 343     238.930 -88.278 123.865  1.00 74.36      A    C
ATOM   1749  NH1 ARG A 343     238.309 -87.268 124.510  1.00 73.84      A    N
ATOM   1750  NH2 ARG A 343     239.502 -89.248 124.573  1.00 82.35      A    N
ATOM   1751  C   ARG A 343     236.902 -85.448 117.406  1.00 62.95      A    C
ATOM   1752  O   ARG A 343     235.682 -85.706 117.372  1.00 61.25      A    O
ATOM   1753  N   VAL A 344     237.421 -84.275 117.011  1.00 62.37      A    N
ATOM   1754  CA  VAL A 344     236.592 -83.163 116.517  1.00 52.53      A    C
ATOM   1755  CB  VAL A 344     235.625 -83.614 115.386  1.00 46.83      A    C
ATOM   1756  CG1 VAL A 344     235.005 -82.383 114.685  1.00 30.17      A    C
ATOM   1757  CG2 VAL A 344     236.378 -84.445 114.375  1.00 41.05      A    C
ATOM   1758  C   VAL A 344     235.794 -82.735 117.737  1.00 56.35      A    C
ATOM   1759  O   VAL A 344     234.569 -82.790 117.750  1.00 58.20      A    O
ATOM   1760  N   GLU A 345     236.521 -82.345 118.775  1.00 52.70      A    N
ATOM   1761  CA  GLU A 345     235.945 -81.929 120.037  1.00 55.50      A    C
ATOM   1762  CB  GLU A 345     236.726 -82.610 121.170  1.00 59.39      A    C
ATOM   1763  CG  GLU A 345     236.049 -82.656 122.512  1.00 70.94      A    C
ATOM   1764  CD  GLU A 345     236.741 -83.623 123.456  1.00 80.37      A    C
ATOM   1765  OE1 GLU A 345     236.904 -84.815 123.076  1.00 83.68      A    O
ATOM   1766  OE2 GLU A 345     237.114 -83.190 124.572  1.00 84.85      A    O
ATOM   1767  C   GLU A 345     235.984 -80.414 120.226  1.00 55.94      A    C
ATOM   1768  O   GLU A 345     237.012 -79.866 120.647  1.00 52.34      A    O
ATOM   1769  N   PHE A 346     234.868 -79.746 119.941  1.00 55.31      A    N
ATOM   1770  CA  PHE A 346     234.777 -78.298 120.123  1.00 58.97      A    C
ATOM   1771  CB  PHE A 346     235.238 -77.601 118.840  1.00 55.59      A    C
ATOM   1772  CG  PHE A 346     234.247 -77.671 117.721  1.00 51.30      A    C
ATOM   1773  CD1 PHE A 346     233.315 -76.667 117.540  1.00 47.92      A    C
ATOM   1774  CD2 PHE A 346     234.261 -78.734 116.842  1.00 51.74      A    C
ATOM   1775  CE1 PHE A 346     232.396 -76.715 116.483  1.00 54.03      A    C
ATOM   1776  CE2 PHE A 346     233.348 -78.810 115.764  1.00 54.32      A    C
ATOM   1777  CZ  PHE A 346     232.409 -77.803 115.575  1.00 51.48      A    C
ATOM   1778  C   PHE A 346     233.356 -77.832 120.501  1.00 60.04      A    C
ATOM   1779  O   PHE A 346     232.368 -78.494 120.173  1.00 69.92      A    O
ATOM   1780  N   THR A 347     233.261 -76.697 121.184  1.00 56.17      A    N
ATOM   1781  CA  THR A 347     231.979 -76.158 121.555  1.00 54.44      A    C
ATOM   1782  CB  THR A 347     231.732 -76.329 123.013  1.00 47.09      A    C
ATOM   1783  OG1 THR A 347     232.718 -75.600 123.725  1.00 47.43      A    O
ATOM   1784  CG2 THR A 347     231.799 -77.783 123.402  1.00 48.24      A    C
ATOM   1785  C   THR A 347     231.885 -74.683 121.223  1.00 56.33      A    C
ATOM   1786  O   THR A 347     232.902 -73.985 121.113  1.00 62.80      A    O
ATOM   1787  N   PHE A 348     230.646 -74.235 120.999  1.00 63.69      A    N
ATOM   1788  CA  PHE A 348     230.389 -72.815 120.723  1.00 65.89      A    C
ATOM   1789  CB  PHE A 348     229.306 -72.558 119.708  1.00 57.72      A    C
ATOM   1790  CG  PHE A 348     229.584 -73.148 118.381  1.00 55.81      A    C
ATOM   1791  CD1 PHE A 348     229.017 -74.364 118.020  1.00 51.99      A    C
ATOM   1792  CD2 PHE A 348     230.337 -72.462 117.450  1.00 53.67      A    C
ATOM   1793  CE1 PHE A 348     229.171 -74.857 116.780  1.00 46.52      A    C
ATOM   1794  CE2 PHE A 348     230.492 -72.966 116.190  1.00 50.86      A    C
ATOM   1795  CZ  PHE A 348     229.903 -74.166 115.860  1.00 51.38      A    C
ATOM   1796  C   PHE A 348     229.966 -72.048 121.961  1.00 65.81      A    C
ATOM   1797  O   PHE A 348     229.223 -72.532 122.808  1.00 73.51      A    O
ATOM   1798  N   PRO A 349     230.578 -70.898 122.150  1.00 59.06      A    N
ATOM   1799  CD  PRO A 349     232.018 -71.026 121.861  1.00 61.27      A    C
ATOM   1800  CA  PRO A 349     230.381 -69.933 123.199  1.00 56.66      A    C
ATOM   1801  CB  PRO A 349     231.466 -68.944 122.870  1.00 58.77      A    C
ATOM   1802  CG  PRO A 349     232.627 -69.875 122.485  1.00 55.14      A    C
ATOM   1803  C   PRO A 349     228.929 -69.409 122.948  1.00 57.97      A    C
ATOM   1804  O   PRO A 349     228.312 -69.642 121.916  1.00 59.47      A    O
ATOM   1805  N   ASP A 350     228.344 -68.735 123.909  1.00 59.19      A    N
ATOM   1806  CA  ASP A 350     226.961 -68.282 123.714  1.00 51.98      A    C
ATOM   1807  CB  ASP A 350     226.338 -67.819 125.044  1.00 65.27      A    C
ATOM   1808  CG  ASP A 350     226.140 -68.958 126.020  1.00 72.68      A    C
ATOM   1809  OD1 ASP A 350     225.764 -68.668 127.188  1.00 77.91      A    O
ATOM   1810  OD2 ASP A 350     226.359 -70.131 125.607  1.00 78.14      A    O
ATOM   1811  C   ASP A 350     226.787 -67.197 122.665  1.00 54.69      A    C
ATOM   1812  O   ASP A 350     225.753 -67.202 121.947  1.00 40.28      A    O
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ATOM	1813	N	PHE	A	351	227.786	-66.308	122.539	1.00	47.45	A N
ATOM	1814	CA	PHE	A	351	227.682	-65.217	121.584	1.00	51.83	A C
ATOM	1815	CB	PHE	A	351	228.693	-64.106	121.893	1.00	48.14	A C
ATOM	1816	CG	PHE	A	351	230.108	-64.580	122.004	1.00	51.21	A C
ATOM	1817	CD1	PHE	A	351	230.589	-65.111	123.207	1.00	49.73	A C
ATOM	1818	CD2	PHE	A	351	230.979	-64.468	120.915	1.00	46.79	A C
ATOM	1819	CE1	PHE	A	351	231.906	-65.506	123.312	1.00	48.51	A C
ATOM	1820	CE2	PHE	A	351	232.294	-64.864	121.026	1.00	47.18	A C
ATOM	1821	CZ	PHE	A	351	232.758	-65.379	122.215	1.00	45.61	A C
ATOM	1822	C	PHE	A	351	227.797	-65.610	120.125	1.00	52.56	A C
ATOM	1823	O	PHE	A	351	227.604	-64.771	119.250	1.00	57.29	A O
ATOM	1824	N	VAL	A	352	228.115	-66.874	119.863	1.00	54.95	A N
ATOM	1825	CA	VAL	A	352	228.263	-67.341	118.495	1.00	48.00	A C
ATOM	1826	CB	VAL	A	352	229.145	-68.621	118.432	1.00	43.19	A C
ATOM	1827	CG1	VAL	A	352	229.300	-69.094	117.035	1.00	33.61	A C
ATOM	1828	CG2	VAL	A	352	230.509	-68.325	118.972	1.00	39.08	A C
ATOM	1829	C	VAL	A	352	226.875	-67.603	117.916	1.00	48.25	A C
ATOM	1830	O	VAL	A	352	226.211	-68.567	118.255	1.00	51.46	A O
ATOM	1831	N	THR	A	353	226.446	-66.748	117.004	1.00	47.51	A N
ATOM	1832	CA	THR	A	353	225.122	-66.886	116.413	1.00	53.02	A C
ATOM	1833	CB	THR	A	353	224.844	-65.817	115.383	1.00	47.94	A C
ATOM	1834	OG1	THR	A	353	225.671	-66.052	114.246	1.00	54.22	A O
ATOM	1835	CG2	THR	A	353	225.130	-64.437	115.950	1.00	47.89	A C
ATOM	1836	C	THR	A	353	224.908	-68.227	115.753	1.00	52.60	A C
ATOM	1837	O	THR	A	353	225.851	-68.974	115.552	1.00	52.94	A O
ATOM	1838	N	GLU	A	354	223.654	-68.513	115.404	1.00	55.25	A N
ATOM	1839	CA	GLU	A	354	223.259	-69.786	114.819	1.00	56.40	A C
ATOM	1840	CB	GLU	A	354	221.736	-69.929	114.829	1.00	53.45	A C
ATOM	1841	C	GLU	A	354	223.762	-69.866	113.416	1.00	56.12	A C
ATOM	1842	O	GLU	A	354	224.078	-70.954	112.927	1.00	62.85	A O
ATOM	1843	N	GLY	A	355	223.831	-68.718	112.749	1.00	61.99	A N
ATOM	1844	CA	GLY	A	355	224.317	-68.699	111.373	1.00	52.27	A C
ATOM	1845	C	GLY	A	355	225.787	-69.093	111.250	1.00	52.90	A C
ATOM	1846	O	GLY	A	355	226.166	-69.822	110.327	1.00	47.53	A O
ATOM	1847	N	ALA	A	356	226.611	-68.602	112.182	1.00	47.86	A N
ATOM	1848	CA	ALA	A	356	228.022	-68.912	112.199	1.00	45.96	A C
ATOM	1849	CB	ALA	A	356	228.721	-67.995	113.123	1.00	42.05	A C
ATOM	1850	C	ALA	A	356	228.221	-70.359	112.627	1.00	47.72	A C
ATOM	1851	O	ALA	A	356	229.011	-71.078	112.025	1.00	46.93	A O
ATOM	1852	N	ARG	A	357	227.486	-70.784	113.651	1.00	49.03	A N
ATOM	1853	CA	ARG	A	357	227.558	-72.153	114.146	1.00	56.76	A C
ATOM	1854	CB	ARG	A	357	226.549	-72.374	115.280	1.00	55.71	A C
ATOM	1855	CG	ARG	A	357	226.876	-71.606	116.583	1.00	57.21	A C
ATOM	1856	CD	ARG	A	357	226.018	-72.108	117.752	1.00	41.40	A C
ATOM	1857	NE	ARG	A	357	226.260	-71.310	118.928	1.00	43.14	A N
ATOM	1858	CZ	ARG	A	357	225.979	-71.698	120.148	1.00	39.58	A C
ATOM	1859	NH1	ARG	A	357	225.456	-72.893	120.340	1.00	42.66	A N
ATOM	1860	NH2	ARG	A	357	226.191	-70.869	121.163	1.00	51.41	A N
ATOM	1861	C	ARG	A	357	227.299	-73.181	113.043	1.00	58.61	A C
ATOM	1862	O	ARG	A	357	227.922	-74.260	112.996	1.00	62.70	A O
ATOM	1863	N	ASP	A	358	226.383	-72.845	112.150	1.00	56.80	A N
ATOM	1864	CA	ASP	A	358	226.053	-73.738	111.055	1.00	56.49	A C
ATOM	1865	CB	ASP	A	358	224.792	-73.245	110.363	1.00	59.12	A C
ATOM	1866	CG	ASP	A	358	224.380	-74.141	109.209	1.00	65.41	A C
ATOM	1867	OD1	ASP	A	358	224.036	-75.319	109.461	1.00	60.89	A O
ATOM	1868	OD2	ASP	A	358	224.403	-73.669	108.049	1.00	68.71	A O
ATOM	1869	C	ASP	A	358	227.178	-73.837	110.017	1.00	56.31	A C
ATOM	1870	O	ASP	A	358	227.523	-74.915	109.545	1.00	56.62	A O
ATOM	1871	N	LEU	A	359	227.735	-72.694	109.640	1.00	57.58	A N
ATOM	1872	CA	LEU	A	359	228.812	-72.663	108.658	1.00	55.45	A C
ATOM	1873	CB	LEU	A	359	229.158	-71.227	108.302	1.00	53.49	A C
ATOM	1874	CG	LEU	A	359	230.326	-71.029	107.344	1.00	49.10	A C
ATOM	1875	CD1	LEU	A	359	230.077	-71.756	106.082	1.00	42.56	A C
ATOM	1876	CD2	LEU	A	359	230.525	-69.538	107.083	1.00	51.15	A C
ATOM	1877	C	LEU	A	359	230.048	-73.366	109.200	1.00	57.66	A C
ATOM	1878	O	LEU	A	359	230.680	-74.142	108.481	1.00	65.55	A O
ATOM	1879	N	ILE	A	360	230.370	-73.121	110.470	1.00	49.19	A N
ATOM	1880	CA	ILE	A	360	231.535	-73.740	111.089	1.00	43.07	A C
ATOM	1881	CB	ILE	A	360	231.819	-73.111	112.485	1.00	35.85	A C
ATOM	1882	CG2	ILE	A	360	232.892	-73.858	113.220	1.00	37.90	A C

ATOM	1883	CG1	ILE	A	360	232.254	-71.652	112.301	1.00	32.36	A C
ATOM	1884	CD1	ILE	A	360	232.250	-70.839	113.653	1.00	27.28	A C
ATOM	1885	C	ILE	A	360	231.368	-75.240	111.229	1.00	40.84	A C
ATOM	1886	O	ILE	A	360	232.330	-75.980	111.042	1.00	44.75	A O
ATOM	1887	N	SER	A	361	230.158	-75.670	111.591	1.00	46.60	A N
ATOM	1888	CA	SER	A	361	229.855	-77.089	111.780	1.00	52.65	A C
ATOM	1889	CB	SER	A	361	228.546	-77.265	112.526	1.00	49.78	A C
ATOM	1890	OG	SER	A	361	228.742	-77.062	113.925	1.00	60.97	A O
ATOM	1891	C	SER	A	361	229.827	-77.906	110.497	1.00	53.49	A C
ATOM	1892	O	SER	A	361	229.885	-79.159	110.538	1.00	53.09	A O
ATOM	1893	N	ARG	A	362	229.799	-77.198	109.368	1.00	54.39	A N
ATOM	1894	CA	ARG	A	362	229.796	-77.841	108.066	1.00	52.12	A C
ATOM	1895	CB	ARG	A	362	229.033	-76.978	107.065	1.00	59.93	A C
ATOM	1896	CG	ARG	A	362	227.535	-76.862	107.327	1.00	61.75	A C
ATOM	1897	CD	ARG	A	362	226.887	-75.820	106.401	1.00	69.51	A C
ATOM	1898	NE	ARG	A	362	225.432	-75.784	106.547	1.00	76.19	A N
ATOM	1899	CZ	ARG	A	362	224.625	-76.795	106.216	1.00	80.23	A C
ATOM	1900	NH1	ARG	A	362	225.128	-77.919	105.716	1.00	81.25	A N
ATOM	1901	NH2	ARG	A	362	223.313	-76.697	106.397	1.00	77.76	A N
ATOM	1902	C	ARG	A	362	231.211	-78.066	107.537	1.00	49.26	A C
ATOM	1903	O	ARG	A	362	231.460	-79.036	106.822	1.00	49.03	A O
ATOM	1904	N	LEU	A	363	232.120	-77.162	107.891	1.00	49.05	A N
ATOM	1905	CA	LEU	A	363	233.493	-77.234	107.438	1.00	46.81	A C
ATOM	1906	CB	LEU	A	363	234.134	-75.850	107.508	1.00	42.60	A C
ATOM	1907	CG	LEU	A	363	233.457	-74.729	106.714	1.00	44.53	A C
ATOM	1908	CD1	LEU	A	363	234.050	-73.356	107.133	1.00	43.18	A C
ATOM	1909	CD2	LEU	A	363	233.602	-74.961	105.258	1.00	42.47	A C
ATOM	1910	C	LEU	A	363	234.270	-78.228	108.280	1.00	49.03	A C
ATOM	1911	O	LEU	A	363	235.049	-79.020	107.751	1.00	57.90	A O
ATOM	1912	N	LEU	A	364	234.062	-78.186	109.589	1.00	47.92	A N
ATOM	1913	CA	LEU	A	364	234.774	-79.071	110.488	1.00	49.66	A C
ATOM	1914	CB	LEU	A	364	234.792	-78.462	111.909	1.00	46.24	A C
ATOM	1915	CG	LEU	A	364	235.511	-77.115	112.043	1.00	47.59	A C
ATOM	1916	CD1	LEU	A	364	235.230	-76.547	113.413	1.00	44.59	A C
ATOM	1917	CD2	LEU	A	364	237.029	-77.318	111.836	1.00	45.40	A C
ATOM	1918	C	LEU	A	364	234.233	-80.493	110.526	1.00	50.53	A C
ATOM	1919	O	LEU	A	364	233.804	-80.963	111.575	1.00	56.94	A O
ATOM	1920	N	LYS	A	365	234.267	-81.178	109.385	1.00	61.00	A N
ATOM	1921	CA	LYS	A	365	233.796	-82.564	109.263	1.00	64.52	A C
ATOM	1922	CB	LYS	A	365	233.059	-82.728	107.925	1.00	60.48	A C
ATOM	1923	CG	LYS	A	365	231.753	-81.921	107.829	1.00	53.27	A C
ATOM	1924	CD	LYS	A	365	230.702	-82.412	108.828	1.00	61.58	A C
ATOM	1925	CE	LYS	A	365	229.295	-81.895	108.447	1.00	59.92	A C
ATOM	1926	NZ	LYS	A	365	228.297	-82.223	109.508	1.00	75.42	A N
ATOM	1927	C	LYS	A	365	235.026	-83.500	109.392	1.00	66.56	A C
ATOM	1928	O	LYS	A	365	236.146	-83.084	109.123	1.00	71.71	A O
ATOM	1929	N	HIS	A	366	234.844	-84.748	109.813	1.00	68.20	A N
ATOM	1930	CA	HIS	A	366	236.011	-85.628	110.015	1.00	67.59	A C
ATOM	1931	CB	HIS	A	366	235.781	-86.664	111.109	1.00	66.12	A C
ATOM	1932	CG	HIS	A	366	236.913	-87.628	111.242	1.00	68.47	A C
ATOM	1933	CD2	HIS	A	366	237.810	-87.749	112.245	1.00	66.88	A C
ATOM	1934	ND1	HIS	A	366	237.332	-88.487	110.238	1.00	66.01	A N
ATOM	1935	CE1	HIS	A	366	238.454	-89.075	110.623	1.00	70.20	A C
ATOM	1936	NE2	HIS	A	366	238.761	-88.643	111.832	1.00	64.97	A N
ATOM	1937	C	HIS	A	366	236.184	-86.385	108.739	1.00	68.25	A C
ATOM	1938	O	HIS	A	366	237.098	-87.249	108.572	1.00	74.87	A O
ATOM	1939	N	ASN	A	367	235.262	-86.111	107.848	1.00	65.45	A N
ATOM	1940	CA	ASN	A	367	235.379	-86.795	106.656	1.00	62.81	A C
ATOM	1941	CB	ASN	A	367	234.189	-87.664	106.498	1.00	64.61	A C
ATOM	1942	CG	ASN	A	367	234.335	-88.548	105.333	1.00	69.77	A C
ATOM	1943	OD1	ASN	A	367	234.339	-88.071	104.175	1.00	65.35	A O
ATOM	1944	ND2	ASN	A	367	234.518	-89.855	105.596	1.00	69.27	A N
ATOM	1945	C	ASN	A	367	235.504	-85.791	105.596	1.00	60.17	A C
ATOM	1946	O	ASN	A	367	234.685	-84.923	105.475	1.00	67.65	A O
ATOM	1947	N	PRO	A	368	236.650	-85.797	104.923	1.00	60.54	A N
ATOM	1948	CD	PRO	A	368	237.882	-86.364	105.504	1.00	55.35	A C
ATOM	1949	CA	PRO	A	368	236.981	-84.895	103.820	1.00	55.82	A C
ATOM	1950	CB	PRO	A	368	238.199	-85.537	103.245	1.00	50.93	A C
ATOM	1951	CG	PRO	A	368	238.938	-85.936	104.468	1.00	54.85	A C
ATOM	1952	C	PRO	A	368	235.870	-84.741	102.783	1.00	59.90	A C

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ATOM   1953  O   PRO A 368     235.706 -83.658 102.240  1.00 61.00      A    O
ATOM   1954  N   SER A 369     235.093 -85.805 102.557  1.00 69.67      A    N
ATOM   1955  CA  SER A 369     234.000 -85.800 101.588  1.00 72.88      A    C
ATOM   1956  CB  SER A 369     233.537 -87.237 101.347  1.00 75.22      A    C
ATOM   1957  OG  SER A 369     234.654 -88.115 101.256  1.00 85.92      A    O
ATOM   1958  C   SER A 369     232.810 -84.951 102.046  1.00 71.84      A    C
ATOM   1959  O   SER A 369     232.217 -84.231 101.229  1.00 75.53      A    O
ATOM   1960  N   GLN A 370     232.465 -85.039 103.333  1.00 67.85      A    N
ATOM   1961  CA  GLN A 370     231.339 -84.296 103.865  1.00 62.69      A    C
ATOM   1962  CB  GLN A 370     231.067 -84.743 105.296  1.00 64.15      A    C
ATOM   1963  CG  GLN A 370     230.629 -86.190 105.390  1.00 65.40      A    C
ATOM   1964  CD  GLN A 370     230.923 -86.768 106.745  1.00 69.41      A    C
ATOM   1965  OE1 GLN A 370     230.904 -86.051 107.752  1.00 75.34      A    O
ATOM   1966  NE2 GLN A 370     231.189 -88.073 106.792  1.00 63.71      A    N
ATOM   1967  C   GLN A 370     231.551 -82.778 103.799  1.00 63.34      A    C
ATOM   1968  O   GLN A 370     230.582 -82.028 103.608  1.00 65.90      A    O
ATOM   1969  N   ARG A 371     232.802 -82.324 103.934  1.00 56.18      A    N
ATOM   1970  CA  ARG A 371     233.085 -80.905 103.889  1.00 54.33      A    C
ATOM   1971  CB  ARG A 371     234.581 -80.691 103.961  1.00 48.64      A    C
ATOM   1972  CG  ARG A 371     235.109 -80.785 105.354  1.00 46.61      A    C
ATOM   1973  CD  ARG A 371     236.618 -80.922 105.403  1.00 43.30      A    C
ATOM   1974  NE  ARG A 371     236.988 -81.971 106.350  1.00 42.51      A    N
ATOM   1975  CZ  ARG A 371     238.208 -82.476 106.436  1.00 42.45      A    C
ATOM   1976  NH1 ARG A 371     239.165 -81.997 105.635  1.00 36.24      A    N
ATOM   1977  NH2 ARG A 371     238.449 -83.494 107.266  1.00 33.74      A    N
ATOM   1978  C   ARG A 371     232.496 -80.275 102.651  1.00 56.25      A    C
ATOM   1979  O   ARG A 371     232.578 -80.836 101.587  1.00 64.77      A    O
ATOM   1980  N   PRO A 372     231.885 -79.089 102.783  1.00 60.04      A    N
ATOM   1981  CD  PRO A 372     231.813 -78.305 104.029  1.00 57.31      A    C
ATOM   1982  CA  PRO A 372     231.260 -78.365 101.659  1.00 57.19      A    C
ATOM   1983  CB  PRO A 372     230.522 -77.231 102.348  1.00 55.89      A    C
ATOM   1984  CG  PRO A 372     231.448 -76.927 103.522  1.00 60.48      A    C
ATOM   1985  C   PRO A 372     232.227 -77.848 100.593  1.00 59.74      A    C
ATOM   1986  O   PRO A 372     233.424 -77.896 100.753  1.00 60.73      A    O
ATOM   1987  N   MET A 373     231.685 -77.356  99.497  1.00 66.48      A    N
ATOM   1988  CA  MET A 373     232.482 -76.838  98.412  1.00 72.53      A    C
ATOM   1989  CB  MET A 373     231.763 -77.051  97.082  1.00 78.23      A    C
ATOM   1990  CG  MET A 373     232.541 -77.969  96.165  1.00 91.60      A    C
ATOM   1991  SD  MET A 373     231.857 -78.033  94.463  1.00 92.28      A    S
ATOM   1992  CE  MET A 373     230.337 -78.924  94.769  1.00 97.23      A    C
ATOM   1993  C   MET A 373     232.631 -75.339  98.682  1.00 69.48      A    C
ATOM   1994  O   MET A 373     231.861 -74.740  99.424  1.00 71.05      A    O
ATOM   1995  N   LEU A 374     233.618 -74.722  98.060  1.00 66.97      A    N
ATOM   1996  CA  LEU A 374     233.847 -73.303  98.261  1.00 65.90      A    C
ATOM   1997  CB  LEU A 374     235.155 -72.857  97.562  1.00 58.73      A    C
ATOM   1998  CG  LEU A 374     236.446 -73.311  98.258  1.00 51.64      A    C
ATOM   1999  CD1 LEU A 374     237.625 -73.104  97.321  1.00 47.33      A    C
ATOM   2000  CD2 LEU A 374     236.629 -72.531  99.548  1.00 52.27      A    C
ATOM   2001  C   LEU A 374     232.660 -72.469  97.798  1.00 67.13      A    C
ATOM   2002  O   LEU A 374     232.500 -71.320  98.219  1.00 75.20      A    O
ATOM   2003  N   ARG A 375     231.814 -73.025  96.939  1.00 67.09      A    N
ATOM   2004  CA  ARG A 375     230.654 -72.254  96.482  1.00 63.14      A    C
ATOM   2005  CB  ARG A 375     230.122 -72.780  95.162  1.00 60.43      A    C
ATOM   2006  C   ARG A 375     229.561 -72.275  97.541  1.00 63.36      A    C
ATOM   2007  O   ARG A 375     228.882 -71.261  97.734  1.00 64.17      A    O
ATOM   2008  N   GLU A 376     229.413 -73.397  98.245  1.00 56.91      A    N
ATOM   2009  CA  GLU A 376     228.404 -73.501  99.306  1.00 64.22      A    C
ATOM   2010  CB  GLU A 376     228.314 -74.947  99.815  1.00 67.11      A    C
ATOM   2011  CG  GLU A 376     227.797 -75.921  98.783  1.00 81.78      A    C
ATOM   2012  CD  GLU A 376     228.016 -77.372  99.187  1.00 87.25      A    C
ATOM   2013  OE1 GLU A 376     229.137 -77.887  98.974  1.00 95.99      A    O
ATOM   2014  OE2 GLU A 376     227.073 -78.001  99.732  1.00 98.67      A    O
ATOM   2015  C   GLU A 376     228.791 -72.562 100.461  1.00 61.59      A    C
ATOM   2016  O   GLU A 376     227.950 -72.145 101.275  1.00 63.73      A    O
ATOM   2017  N   VAL A 377     230.078 -72.229 100.505  1.00 60.90      A    N
ATOM   2018  CA  VAL A 377     230.605 -71.361 101.539  1.00 60.11      A    C
ATOM   2019  CB  VAL A 377     232.149 -71.606 101.780  1.00 57.13      A    C
ATOM   2020  CG1 VAL A 377     232.701 -70.591 102.788  1.00 52.18      A    C
ATOM   2021  CG2 VAL A 377     232.364 -72.987 102.341  1.00 51.22      A    C
ATOM   2022  C   VAL A 377     230.354 -69.928 101.140  1.00 59.92      A    C
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ATOM	2023	O	VAL	A	377	229.915	-69.114	101.952	1.00	69.33	A O
ATOM	2024	N	LEU	A	378	230.639	-69.625	99.884	1.00	54.97	A N
ATOM	2025	CA	LEU	A	378	230.466	-68.269	99.384	1.00	57.61	A C
ATOM	2026	CB	LEU	A	378	231.178	-68.090	98.026	1.00	55.37	A C
ATOM	2027	CG	LEU	A	378	232.564	-67.442	97.937	1.00	56.77	A C
ATOM	2028	CD1	LEU	A	378	232.986	-66.902	99.309	1.00	59.47	A C
ATOM	2029	CD2	LEU	A	378	233.517	-68.445	97.421	1.00	52.34	A C
ATOM	2030	C	LEU	A	378	228.995	-67.925	99.248	1.00	53.77	A C
ATOM	2031	O	LEU	A	378	228.626	-66.775	99.062	1.00	56.35	A O
ATOM	2032	N	GLU	A	379	228.144	-68.930	99.367	1.00	58.84	A N
ATOM	2033	CA	GLU	A	379	226.708	-68.714	99.236	1.00	63.13	A C
ATOM	2034	CB	GLU	A	379	226.101	-69.720	98.274	1.00	65.30	A C
ATOM	2035	CG	GLU	A	379	226.567	-69.569	96.831	1.00	70.53	A C
ATOM	2036	CD	GLU	A	379	225.831	-70.533	95.895	1.00	76.21	A C
ATOM	2037	OE1	GLU	A	379	225.546	-71.692	96.329	1.00	70.09	A O
ATOM	2038	OE2	GLU	A	379	225.547	-70.124	94.737	1.00	76.09	A O
ATOM	2039	C	GLU	A	379	225.991	-68.820	100.555	1.00	60.26	A C
ATOM	2040	O	GLU	A	379	224.963	-68.191	100.746	1.00	70.86	A O
ATOM	2041	N	HIS	A	380	226.535	-69.606	101.468	1.00	54.34	A N
ATOM	2042	CA	HIS	A	380	225.921	-69.775	102.771	1.00	54.61	A C
ATOM	2043	CB	HIS	A	380	226.975	-70.234	103.793	1.00	48.39	A C
ATOM	2044	CG	HIS	A	380	226.402	-70.617	105.121	1.00	45.24	A C
ATOM	2045	CD2	HIS	A	380	226.402	-71.793	105.781	1.00	42.14	A C
ATOM	2046	ND1	HIS	A	380	225.711	-69.731	105.921	1.00	51.46	A N
ATOM	2047	CE1	HIS	A	380	225.309	-70.349	107.018	1.00	50.88	A C
ATOM	2048	NE2	HIS	A	380	225.715	-71.604	106.957	1.00	47.24	A N
ATOM	2049	C	HIS	A	380	225.231	-68.502	103.261	1.00	55.95	A C
ATOM	2050	O	HIS	A	380	225.807	-67.409	103.206	1.00	60.83	A O
ATOM	2051	N	PRO	A	381	223.970	-68.630	103.727	1.00	55.60	A N
ATOM	2052	CD	PRO	A	381	223.229	-69.910	103.809	1.00	51.69	A C
ATOM	2053	CA	PRO	A	381	223.147	-67.522	104.248	1.00	53.48	A C
ATOM	2054	CB	PRO	A	381	221.997	-68.257	104.936	1.00	49.53	A C
ATOM	2055	CG	PRO	A	381	221.820	-69.442	104.035	1.00	49.24	A C
ATOM	2056	C	PRO	A	381	223.875	-66.545	105.212	1.00	56.98	A C
ATOM	2057	O	PRO	A	381	223.758	-65.320	105.074	1.00	59.03	A O
ATOM	2058	N	TRP	A	382	224.635	-67.091	106.164	1.00	54.77	A N
ATOM	2059	CA	TRP	A	382	225.340	-66.282	107.146	1.00	55.06	A C
ATOM	2060	CB	TRP	A	382	225.971	-67.165	108.240	1.00	54.64	A C
ATOM	2061	CG	TRP	A	382	226.691	-66.368	109.261	1.00	55.47	A C
ATOM	2062	CD2	TRP	A	382	228.111	-66.195	109.372	1.00	58.05	A C
ATOM	2063	CE2	TRP	A	382	228.344	-65.342	110.476	1.00	60.80	A C
ATOM	2064	CE3	TRP	A	382	229.210	-66.680	108.649	1.00	60.95	A C
ATOM	2065	CD1	TRP	A	382	226.137	-65.634	110.266	1.00	58.89	A C
ATOM	2066	NE1	TRP	A	382	227.123	-65.011	111.004	1.00	59.37	A N
ATOM	2067	CZ2	TRP	A	382	229.632	-64.965	110.871	1.00	64.01	A C
ATOM	2068	CZ3	TRP	A	382	230.491	-66.302	109.042	1.00	60.80	A C
ATOM	2069	CH2	TRP	A	382	230.688	-65.458	110.140	1.00	65.05	A C
ATOM	2070	C	TRP	A	382	226.397	-65.476	106.455	1.00	50.36	A C
ATOM	2071	O	TRP	A	382	226.579	-64.300	106.749	1.00	56.46	A O
ATOM	2072	N	ILE	A	383	227.094	-66.115	105.527	1.00	50.17	A N
ATOM	2073	CA	ILE	A	383	228.163	-65.454	104.757	1.00	51.21	A C
ATOM	2074	CB	ILE	A	383	228.914	-66.460	103.856	1.00	42.86	A C
ATOM	2075	CG2	ILE	A	383	229.642	-65.709	102.766	1.00	42.15	A C
ATOM	2076	CG1	ILE	A	383	229.846	-67.329	104.708	1.00	40.04	A C
ATOM	2077	CD1	ILE	A	383	230.943	-66.520	105.429	1.00	40.46	A C
ATOM	2078	C	ILE	A	383	227.659	-64.305	103.873	1.00	52.36	A C
ATOM	2079	O	ILE	A	383	228.247	-63.229	103.858	1.00	51.23	A O
ATOM	2080	N	THR	A	384	226.553	-64.533	103.166	1.00	54.23	A N
ATOM	2081	CA	THR	A	384	225.978	-63.535	102.275	1.00	58.09	A C
ATOM	2082	CB	THR	A	384	225.046	-64.197	101.265	1.00	57.25	A C
ATOM	2083	OG1	THR	A	384	224.320	-65.235	101.920	1.00	65.44	A O
ATOM	2084	CG2	THR	A	384	225.809	-64.804	100.133	1.00	59.94	A C
ATOM	2085	C	THR	A	384	225.221	-62.436	102.988	1.00	57.62	A C
ATOM	2086	O	THR	A	384	224.929	-61.395	102.420	1.00	61.64	A O
ATOM	2087	N	ALA	A	385	224.911	-62.655	104.249	1.00	60.34	A N
ATOM	2088	CA	ALA	A	385	224.195	-61.658	105.030	1.00	57.14	A C
ATOM	2089	CB	ALA	A	385	223.197	-62.376	105.944	1.00	61.04	A C
ATOM	2090	C	ALA	A	385	225.112	-60.735	105.867	1.00	57.68	A C
ATOM	2091	O	ALA	A	385	224.644	-59.765	106.467	1.00	56.76	A O
ATOM	2092	N	ASN	A	386	226.405	-61.038	105.919	1.00	57.22	A N

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ATOM   2093  CA  ASN A 386     227.312 -60.217 106.705  1.00 59.50      A    C
ATOM   2094  CB  ASN A 386     227.751 -60.993 107.939  1.00 58.18      A    C
ATOM   2095  CG  ASN A 386     226.583 -61.313 108.874  1.00 60.78      A    C
ATOM   2096  OD1 ASN A 386     226.026 -60.419 109.536  1.00 55.54      A    O
ATOM   2097  ND2 ASN A 386     226.201 -62.591 108.923  1.00 55.70      A    N
ATOM   2098  C   ASN A 386     228.540 -59.733 105.965  1.00 55.04      A    C
ATOM   2099  O   ASN A 386     229.128 -58.723 106.336  1.00 58.67      A    O
ATOM   2100  N   SER A 387     228.903 -60.444 104.906  1.00 58.95      A    N
ATOM   2101  CA  SER A 387     230.095 -60.110 104.132  1.00 63.83      A    C
ATOM   2102  CB  SER A 387     230.472 -61.278 103.220  1.00 55.03      A    C
ATOM   2103  OG  SER A 387     231.719 -61.061 102.599  1.00 57.80      A    O
ATOM   2104  C   SER A 387     229.865 -58.867 103.278  1.00 64.86      A    C
ATOM   2105  O   SER A 387     228.745 -58.607 102.826  1.00 68.20      A    O
ATOM   2106  N   SER A 388     230.916 -58.091 103.063  1.00 67.77      A    N
ATOM   2107  CA  SER A 388     230.786 -56.912 102.251  1.00 71.39      A    C
ATOM   2108  CB  SER A 388     231.430 -55.722 102.969  1.00 71.24      A    C
ATOM   2109  OG  SER A 388     232.815 -55.916 103.141  1.00 79.50      A    O
ATOM   2110  C   SER A 388     231.403 -57.150 100.872  1.00 71.24      A    C
ATOM   2111  O   SER A 388     231.024 -56.501  99.909  1.00 76.22      A    O
ATOM   2112  N   LYS A 389     232.336 -58.091 100.767  1.00 70.18      A    N
ATOM   2113  CA  LYS A 389     232.951 -58.347  99.475  1.00 67.46      A    C
ATOM   2114  CB  LYS A 389     234.459 -58.686  99.667  1.00 49.89      A    C
ATOM   2115  C   LYS A 389     232.216 -59.459  98.688  1.00 68.81      A    C
ATOM   2116  O   LYS A 389     231.441 -60.236  99.337  1.00 76.61      A    O
ATOM   2117  OXT LYS A 389     232.453 -59.564  97.435  1.00 76.72      A    O
ATOM   2118  PB  ADP S 531     257.416 -68.553 107.649  1.00 34.84      S    P
ATOM   2119  O1B ADP S 531     258.545 -67.776 107.191  1.00 50.81      S    O
ATOM   2120  O2B ADP S 531     257.209 -69.880 106.879  1.00 48.35      S    O
ATOM   2121  O3B ADP S 531     257.422 -68.756 109.226  1.00 53.79      S    O
ATOM   2122  PA  ADP S 531     256.077 -66.204 106.616  1.00 35.25      S    P
ATOM   2123  O1A ADP S 531     256.842 -66.123 105.373  1.00 33.66      S    O
ATOM   2124  O2A ADP S 531     254.551 -65.860 106.461  1.00 54.13      S    O
ATOM   2125  O3A ADP S 531     256.162 -67.643 107.261  1.00 62.78      S    O
ATOM   2126  O5* ADP S 531     256.892 -65.243 107.657  1.00 48.32      S    O
ATOM   2127  C5* ADP S 531     256.442 -65.218 109.085  1.00 61.70      S    C
ATOM   2128  C4* ADP S 531     255.856 -63.898 109.556  1.00 46.54      S    C
ATOM   2129  O4* ADP S 531     256.542 -62.868 108.818  1.00 44.98      S    O
ATOM   2130  C3* ADP S 531     254.372 -63.620 109.292  1.00 37.55      S    C
ATOM   2131  O3* ADP S 531     253.658 -64.161 110.347  1.00 46.23      S    O
ATOM   2132  C2* ADP S 531     254.337 -62.080 109.181  1.00 46.36      S    C
ATOM   2133  O2* ADP S 531     254.148 -61.399 110.423  1.00 42.59      S    O
ATOM   2134  C1* ADP S 531     255.710 -61.716 108.597  1.00 43.16      S    C
ATOM   2135  N9  ADP S 531     255.666 -61.436 107.162  1.00 48.23      S    N
ATOM   2136  C8  ADP S 531     255.946 -62.302 106.136  1.00 47.43      S    C
ATOM   2137  N7  ADP S 531     255.811 -61.734 104.897  1.00 42.83      S    N
ATOM   2138  C5  ADP S 531     255.418 -60.464 105.177  1.00 40.36      S    C
ATOM   2139  C6  ADP S 531     255.122 -59.337 104.279  1.00 44.75      S    C
ATOM   2140  N6  ADP S 531     255.151 -59.400 102.949  1.00 22.67      S    N
ATOM   2141  N1  ADP S 531     254.762 -58.153 104.964  1.00 40.38      S    N
ATOM   2142  C2  ADP S 531     254.725 -58.057 106.364  1.00 50.55      S    C
ATOM   2143  N3  ADP S 531     254.992 -59.070 107.188  1.00 51.07      S    N
ATOM   2144  C4  ADP S 531     255.351 -60.245 106.574  1.00 46.49      S    C
ATOM   2145  MG  MG2 X   1     254.502 -68.175 108.413  1.00 47.20      X   MG
ATOM   2146  MG  MG2 X   2     255.864 -71.389 106.282  1.00 52.14      X   MG
ATOM   2147  OH2 WAT W   1     264.531 -71.881  94.078  1.00 38.88      W    O
ATOM   2148  OH2 WAT W   2     242.403 -78.272 113.237  1.00 54.89      W    O
ATOM   2149  OH2 WAT W   3     232.705 -62.634 117.460  1.00 37.08      W    O
ATOM   2150  OH2 WAT W   4     251.977 -73.020 102.685  1.00 62.00      W    O
ATOM   2151  OH2 WAT W   5     275.163 -72.604  97.774  1.00 53.95      W    O
ATOM   2152  OH2 WAT W   6     232.526 -85.909 111.573  1.00 35.05      W    O
ATOM   2153  OH2 WAT W   7     259.170 -71.102 103.608  1.00 40.42      W    O
ATOM   2154  OH2 WAT W   8     249.904 -55.205  99.315  1.00 26.87      W    O
ATOM   2155  OH2 WAT W   9     229.701 -63.236 117.265  1.00 25.50      W    O
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Fig. 6

Table B

ATOM	1	CB	SER	A	123	174.078	193.853	20.627	1.00	33.78	A C
ATOM	2	OG	SER	A	123	173.358	193.080	21.584	1.00	34.86	A O
ATOM	3	C	SER	A	123	173.331	195.751	21.954	1.00	32.28	A C
ATOM	4	O	SER	A	123	174.318	196.187	22.580	1.00	32.38	A O
ATOM	5	N	SER	A	123	174.192	196.109	19.556	1.00	32.09	A N
ATOM	6	CA	SER	A	123	173.449	195.246	20.532	1.00	33.80	A C
ATOM	7	N	LYS	A	124	172.107	195.682	22.463	1.00	30.56	A N
ATOM	8	CA	LYS	A	124	171.860	196.059	23.849	1.00	31.07	A C
ATOM	9	CB	LYS	A	124	170.483	196.727	24.005	1.00	31.64	A C
ATOM	10	CG	LYS	A	124	170.231	197.847	23.021	1.00	33.77	A C
ATOM	11	CD	LYS	A	124	168.734	198.157	22.847	1.00	35.14	A C
ATOM	12	CE	LYS	A	124	168.571	198.989	21.582	1.00	38.52	A C
ATOM	13	NZ	LYS	A	124	167.170	199.182	21.123	1.00	40.74	A N
ATOM	14	C	LYS	A	124	171.929	194.785	24.714	1.00	30.29	A C
ATOM	15	O	LYS	A	124	171.724	194.845	25.913	1.00	30.99	A O
ATOM	16	N	LYS	A	125	172.256	193.646	24.102	1.00	30.71	A N
ATOM	17	CA	LYS	A	125	172.352	192.375	24.835	1.00	29.50	A C
ATOM	18	CB	LYS	A	125	171.942	191.210	23.951	1.00	32.42	A C
ATOM	19	CG	LYS	A	125	170.496	191.147	23.609	1.00	35.74	A C
ATOM	20	CD	LYS	A	125	170.221	189.915	22.777	1.00	38.96	A C
ATOM	21	CE	LYS	A	125	168.757	189.905	22.351	1.00	44.54	A C
ATOM	22	NZ	LYS	A	125	168.305	188.576	21.807	1.00	44.21	A N
ATOM	23	C	LYS	A	125	173.728	192.027	25.381	1.00	26.48	A C
ATOM	24	O	LYS	A	125	174.769	192.438	24.859	1.00	24.13	A O
ATOM	25	N	ARG	A	126	173.713	191.215	26.421	1.00	24.15	A N
ATOM	26	CA	ARG	A	126	174.952	190.756	27.020	1.00	22.33	A C
ATOM	27	CB	ARG	A	126	174.636	189.835	28.191	1.00	21.13	A C
ATOM	28	CG	ARG	A	126	175.841	189.331	28.897	1.00	18.73	A C
ATOM	29	CD	ARG	A	126	175.395	188.263	29.847	1.00	19.74	A C
ATOM	30	NE	ARG	A	126	176.552	187.628	30.420	1.00	16.73	A N
ATOM	31	CZ	ARG	A	126	176.503	186.741	31.394	1.00	17.59	A C
ATOM	32	NH1	ARG	A	126	175.331	186.391	31.902	1.00	16.71	A N
ATOM	33	NH2	ARG	A	126	177.633	186.214	31.854	1.00	18.45	A N
ATOM	34	C	ARG	A	126	175.752	189.995	25.943	1.00	22.44	A C
ATOM	35	O	ARG	A	126	175.252	189.077	25.296	1.00	20.29	A O
ATOM	36	N	GLN	A	127	176.997	190.406	25.763	1.00	21.10	A N
ATOM	37	CA	GLN	A	127	177.904	189.815	24.787	1.00	19.12	A C
ATOM	38	CB	GLN	A	127	178.707	190.934	24.102	1.00	18.99	A C
ATOM	39	CG	GLN	A	127	177.842	191.925	23.355	1.00	15.64	A C
ATOM	40	CD	GLN	A	127	177.154	191.297	22.162	1.00	17.04	A C
ATOM	41	OE1	GLN	A	127	177.748	191.151	21.093	1.00	21.45	A O
ATOM	42	NE2	GLN	A	127	175.902	190.912	22.339	1.00	20.66	A N
ATOM	43	C	GLN	A	127	178.861	188.861	25.496	1.00	17.70	A C
ATOM	44	O	GLN	A	127	179.049	188.941	26.715	1.00	13.46	A O
ATOM	45	N	TRP	A	128	179.460	187.956	24.735	1.00	16.62	A N
ATOM	46	CA	TRP	A	128	180.411	187.014	25.303	1.00	14.25	A C
ATOM	47	CB	TRP	A	128	180.890	186.029	24.237	1.00	13.22	A C
ATOM	48	CG	TRP	A	128	179.858	185.060	23.779	1.00	9.34	A C
ATOM	49	CD2	TRP	A	128	179.264	184.022	24.557	1.00	13.44	A C
ATOM	50	CE2	TRP	A	128	178.396	183.304	23.704	1.00	11.84	A C
ATOM	51	CE3	TRP	A	128	179.389	183.618	25.899	1.00	15.05	A C
ATOM	52	CD1	TRP	A	128	179.338	184.945	22.529	1.00	11.79	A C
ATOM	53	NE1	TRP	A	128	178.460	183.893	22.469	1.00	12.24	A N
ATOM	54	CZ2	TRP	A	128	177.648	182.204	24.146	1.00	10.99	A C
ATOM	55	CZ3	TRP	A	128	178.646	182.523	26.336	1.00	15.81	A C
ATOM	56	CH2	TRP	A	128	177.789	181.828	25.457	1.00	13.35	A C
ATOM	57	C	TRP	A	128	181.611	187.777	25.855	1.00	16.17	A C
ATOM	58	O	TRP	A	128	181.885	188.903	25.457	1.00	17.48	A O
ATOM	59	N	ALA	A	129	182.306	187.146	26.790	1.00	17.52	A N
ATOM	60	CA	ALA	A	129	183.501	187.695	27.415	1.00	17.26	A C
ATOM	61	CB	ALA	A	129	183.129	188.595	28.576	1.00	8.15	A C
ATOM	62	C	ALA	A	129	184.303	186.478	27.906	1.00	17.06	A C
ATOM	63	O	ALA	A	129	183.733	185.426	28.198	1.00	17.77	A O

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ATOM     64  N   LEU A 130     185.618 186.620  27.979  1.00 16.79      A    N
ATOM     65  CA  LEU A 130     186.479 185.540  28.425  1.00 19.53      A    C
ATOM     66  CB  LEU A 130     187.943 186.006  28.392  1.00 19.86      A    C
ATOM     67  CG  LEU A 130     189.050 184.967  28.619  1.00 22.85      A    C
ATOM     68  CD1 LEU A 130     188.897 183.839  27.604  1.00 17.77      A    C
ATOM     69  CD2 LEU A 130     190.429 185.631  28.492  1.00 16.04      A    C
ATOM     70  C   LEU A 130     186.090 185.081  29.834  1.00 21.19      A    C
ATOM     71  O   LEU A 130     186.080 183.885  30.121  1.00 24.25      A    O
ATOM     72  N   GLU A 131     185.756 186.032  30.705  1.00 23.78      A    N
ATOM     73  CA  GLU A 131     185.349 185.729  32.082  1.00 25.83      A    C
ATOM     74  CB  GLU A 131     184.952 187.016  32.834  1.00 30.42      A    C
ATOM     75  CG  GLU A 131     186.005 188.110  32.945  1.00 42.06      A    C
ATOM     76  CD  GLU A 131     186.135 188.977  31.686  1.00 46.89      A    C
ATOM     77  OE1 GLU A 131     185.319 188.822  30.747  1.00 51.89      A    O
ATOM     78  OE2 GLU A 131     187.058 189.821  31.640  1.00 50.51      A    O
ATOM     79  C   GLU A 131     184.146 184.751  32.145  1.00 25.30      A    C
ATOM     80  O   GLU A 131     183.790 184.281  33.227  1.00 21.67      A    O
ATOM     81  N   ASP A 132     183.503 184.473  31.008  1.00 22.51      A    N
ATOM     82  CA  ASP A 132     182.364 183.565  30.989  1.00 22.54      A    C
ATOM     83  CB  ASP A 132     181.458 183.825  29.782  1.00 24.79      A    C
ATOM     84  CG  ASP A 132     180.631 185.120  29.908  1.00 28.99      A    C
ATOM     85  OD1 ASP A 132     180.136 185.417  31.025  1.00 29.67      A    O
ATOM     86  OD2 ASP A 132     180.450 185.824  28.873  1.00 26.45      A    O
ATOM     87  C   ASP A 132     182.752 182.087  30.966  1.00 21.99      A    C
ATOM     88  O   ASP A 132     181.925 181.226  31.267  1.00 22.12      A    O
ATOM     89  N   PHE A 133     183.998 181.781  30.625  1.00 23.02      A    N
ATOM     90  CA  PHE A 133     184.411 180.378  30.554  1.00 22.89      A    C
ATOM     91  CB  PHE A 133     184.812 179.998  29.111  1.00 18.64      A    C
ATOM     92  CG  PHE A 133     183.901 180.565  28.039  1.00 17.41      A    C
ATOM     93  CD1 PHE A 133     184.042 181.884  27.616  1.00 15.80      A    C
ATOM     94  CD2 PHE A 133     182.904 179.783  27.456  1.00 16.46      A    C
ATOM     95  CE1 PHE A 133     183.215 182.414  26.637  1.00 14.66      A    C
ATOM     96  CE2 PHE A 133     182.063 180.305  26.466  1.00 15.10      A    C
ATOM     97  CZ  PHE A 133     182.224 181.626  26.060  1.00 18.42      A    C
ATOM     98  C   PHE A 133     185.557 179.984  31.484  1.00 22.91      A    C
ATOM     99  O   PHE A 133     186.466 180.766  31.755  1.00 24.66      A    O
ATOM    100  N   GLU A 134     185.484 178.767  32.005  1.00 22.49      A    N
ATOM    101  CA  GLU A 134     186.566 178.248  32.814  1.00 21.74      A    C
ATOM    102  CB  GLU A 134     186.054 177.264  33.870  1.00 23.93      A    C
ATOM    103  CG  GLU A 134     185.401 177.912  35.088  1.00 29.62      A    C
ATOM    104  CD  GLU A 134     184.751 176.887  36.020  1.00 37.53      A    C
ATOM    105  OE1 GLU A 134     185.460 175.983  36.533  1.00 38.84      A    O
ATOM    106  OE2 GLU A 134     183.517 176.974  36.236  1.00 43.58      A    O
ATOM    107  C   GLU A 134     187.313 177.528  31.695  1.00 21.49      A    C
ATOM    108  O   GLU A 134     186.702 176.784  30.922  1.00 23.43      A    O
ATOM    109  N   ILE A 135     188.608 177.794  31.564  1.00 19.74      A    N
ATOM    110  CA  ILE A 135     189.425 177.197  30.524  1.00 19.08      A    C
ATOM    111  CB  ILE A 135     190.554 178.149  30.072  1.00 22.58      A    C
ATOM    112  CG2 ILE A 135     191.285 177.543  28.866  1.00 19.44      A    C
ATOM    113  CG1 ILE A 135     189.990 179.541  29.762  1.00 20.52      A    C
ATOM    114  CD1 ILE A 135     188.876 179.535  28.771  1.00 21.85      A    C
ATOM    115  C   ILE A 135     190.099 175.941  31.044  1.00 20.74      A    C
ATOM    116  O   ILE A 135     190.667 175.944  32.140  1.00 19.34      A    O
ATOM    117  N   GLY A 136     190.058 174.876  30.245  1.00 19.98      A    N
ATOM    118  CA  GLY A 136     190.688 173.629  30.637  1.00 19.38      A    C
ATOM    119  C   GLY A 136     191.995 173.397  29.906  1.00 18.61      A    C
ATOM    120  O   GLY A 136     192.742 174.324  29.668  1.00 20.61      A    O
ATOM    121  N   ARG A 137     192.267 172.156  29.533  1.00 22.50      A    N
ATOM    122  CA  ARG A 137     193.500 171.827  28.833  1.00 22.75      A    C
ATOM    123  CB  ARG A 137     193.771 170.325  28.920  1.00 22.49      A    C
ATOM    124  CG  ARG A 137     192.820 169.474  28.047  1.00 20.82      A    C
ATOM    125  CD  ARG A 137     193.107 168.016  28.252  1.00 15.70      A    C
ATOM    126  NE  ARG A 137     192.212 167.104  27.554  1.00 14.70      A    N
ATOM    127  CZ  ARG A 137     192.299 166.784  26.266  1.00 14.90      A    C
ATOM    128  NH1 ARG A 137     193.237 167.305  25.493  1.00 13.75      A    N
ATOM    129  NH2 ARG A 137     191.462 165.900  25.758  1.00 13.41      A    N
ATOM    130  C   ARG A 137     193.396 172.183  27.357  1.00 23.53      A    C
ATOM    131  O   ARG A 137     192.316 172.425  26.840  1.00 24.10      A    O
ATOM    132  N   PRO A 138     194.542 172.250  26.671  1.00 22.98      A    N
ATOM    133  CD  PRO A 138     195.850 172.477  27.313  1.00 19.97      A    C
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ATOM    134  CA  PRO A 138     194.613 172.552  25.237  1.00 22.67      A    C
ATOM    135  CB  PRO A 138     196.116 172.791  25.007  1.00 21.39      A    C
ATOM    136  CG  PRO A 138     196.570 173.354  26.295  1.00 19.67      A    C
ATOM    137  C   PRO A 138     194.135 171.275  24.497  1.00 23.48      A    C
ATOM    138  O   PRO A 138     194.528 170.147  24.876  1.00 21.67      A    O
ATOM    139  N   LEU A 139     193.297 171.435  23.471  1.00 19.70      A    N
ATOM    140  CA  LEU A 139     192.809 170.281  22.716  1.00 19.33      A    C
ATOM    141  CB  LEU A 139     191.340 170.454  22.318  1.00 19.32      A    C
ATOM    142  CG  LEU A 139     190.349 170.509  23.473  1.00 18.46      A    C
ATOM    143  CD1 LEU A 139     188.966 170.866  22.964  1.00 16.26      A    C
ATOM    144  CD2 LEU A 139     190.342 169.178  24.163  1.00 15.61      A    C
ATOM    145  C   LEU A 139     193.636 170.125  21.454  1.00 18.97      A    C
ATOM    146  O   LEU A 139     193.714 169.045  20.883  1.00 20.68      A    O
ATOM    147  N   GLY A 140     194.256 171.215  21.026  1.00 19.57      A    N
ATOM    148  CA  GLY A 140     195.056 171.181  19.825  1.00 16.45      A    C
ATOM    149  C   GLY A 140     195.821 172.461  19.630  1.00 18.41      A    C
ATOM    150  O   GLY A 140     195.560 173.469  20.280  1.00 17.66      A    O
ATOM    151  N   LYS A 141     196.778 172.413  18.713  1.00 23.54      A    N
ATOM    152  CA  LYS A 141     197.635 173.547  18.399  1.00 25.64      A    C
ATOM    153  CB  LYS A 141     199.103 173.104  18.473  1.00 29.50      A    C
ATOM    154  CG  LYS A 141     200.101 174.192  18.080  1.00 37.58      A    C
ATOM    155  CD  LYS A 141     201.550 173.744  18.187  1.00 42.29      A    C
ATOM    156  CE  LYS A 141     202.483 174.918  17.891  1.00 46.12      A    C
ATOM    157  NZ  LYS A 141     203.914 174.481  17.890  1.00 49.84      A    N
ATOM    158  C   LYS A 141     197.313 174.071  16.995  1.00 26.94      A    C
ATOM    159  O   LYS A 141     197.578 173.409  15.986  1.00 26.47      A    O
ATOM    160  N   GLY A 142     196.724 175.256  16.938  1.00 26.51      A    N
ATOM    161  CA  GLY A 142     196.392 175.839  15.656  1.00 26.65      A    C
ATOM    162  C   GLY A 142     197.515 176.753  15.234  1.00 26.71      A    C
ATOM    163  O   GLY A 142     198.384 177.086  16.052  1.00 26.93      A    O
ATOM    164  N   LYS A 143     197.501 177.158  13.969  1.00 24.67      A    N
ATOM    165  CA  LYS A 143     198.529 178.037  13.452  1.00 22.25      A    C
ATOM    166  CB  LYS A 143     198.362 178.220  11.925  1.00 25.89      A    C
ATOM    167  CG  LYS A 143     199.535 178.982  11.307  1.00 30.09      A    C
ATOM    168  CD  LYS A 143     199.516 179.060   9.792  1.00 35.88      A    C
ATOM    169  CE  LYS A 143     200.619 180.037   9.330  1.00 41.66      A    C
ATOM    170  NZ  LYS A 143     200.871 180.206   7.857  1.00 42.97      A    N
ATOM    171  C   LYS A 143     198.554 179.404  14.160  1.00 22.22      A    C
ATOM    172  O   LYS A 143     199.641 179.921  14.425  1.00 22.44      A    O
ATOM    173  N   PHE A 144     197.394 179.986  14.477  1.00 20.35      A    N
ATOM    174  CA  PHE A 144     197.370 181.311  15.130  1.00 21.42      A    C
ATOM    175  CB  PHE A 144     196.429 182.258  14.362  1.00 17.68      A    C
ATOM    176  CG  PHE A 144     196.798 182.429  12.896  1.00 22.16      A    C
ATOM    177  CD1 PHE A 144     196.541 181.421  11.959  1.00 20.33      A    C
ATOM    178  CD2 PHE A 144     197.460 183.574  12.464  1.00 23.47      A    C
ATOM    179  CE1 PHE A 144     196.944 181.564  10.624  1.00 20.91      A    C
ATOM    180  CE2 PHE A 144     197.864 183.716  11.128  1.00 21.10      A    C
ATOM    181  CZ  PHE A 144     197.606 182.708  10.213  1.00 18.55      A    C
ATOM    182  C   PHE A 144     197.001 181.263  16.626  1.00 20.47      A    C
ATOM    183  O   PHE A 144     196.668 182.283  17.246  1.00 20.98      A    O
ATOM    184  N   GLY A 145     197.094 180.072  17.208  1.00 18.58      A    N
ATOM    185  CA  GLY A 145     196.786 179.915  18.616  1.00 19.23      A    C
ATOM    186  C   GLY A 145     196.229 178.538  18.922  1.00 20.99      A    C
ATOM    187  O   GLY A 145     195.911 177.756  18.016  1.00 21.28      A    O
ATOM    188  N   ASN A 146     196.100 178.233  20.204  1.00 20.66      A    N
ATOM    189  CA  ASN A 146     195.574 176.938  20.598  1.00 21.26      A    C
ATOM    190  CB  ASN A 146     196.140 176.544  21.964  1.00 24.59      A    C
ATOM    191  CG  ASN A 146     197.638 176.352  21.939  1.00 27.16      A    C
ATOM    192  OD1 ASN A 146     198.205 175.853  20.956  1.00 32.36      A    O
ATOM    193  ND2 ASN A 146     198.292 176.737  23.015  1.00 27.51      A    N
ATOM    194  C   ASN A 146     194.056 176.878  20.683  1.00 20.53      A    C
ATOM    195  O   ASN A 146     193.370 177.902  20.676  1.00 20.90      A    O
ATOM    196  N   VAL A 147     193.540 175.658  20.740  1.00 18.03      A    N
ATOM    197  CA  VAL A 147     192.121 175.430  20.922  1.00 14.64      A    C
ATOM    198  CB  VAL A 147     191.528 174.515  19.799  1.00 13.96      A    C
ATOM    199  CG1 VAL A 147     190.053 174.217  20.092  1.00 10.05      A    C
ATOM    200  CG2 VAL A 147     191.669 175.213  18.439  1.00  8.41      A    C
ATOM    201  C   VAL A 147     192.142 174.746  22.301  1.00 16.21      A    C
ATOM    202  O   VAL A 147     192.897 173.783  22.523  1.00 14.13      A    O
ATOM    203  N   TYR A 148     191.375 175.299  23.242  1.00 14.89      A    N
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ATOM    204  CA  TYR A 148     191.315 174.786  24.614  1.00 14.47      A    C
ATOM    205  CB  TYR A 148     191.593 175.891  25.642  1.00 12.68      A    C
ATOM    206  CG  TYR A 148     192.910 176.619  25.491  1.00 18.66      A    C
ATOM    207  CD1 TYR A 148     193.031 177.690  24.605  1.00 16.46      A    C
ATOM    208  CE1 TYR A 148     194.243 178.347  24.434  1.00 18.77      A    C
ATOM    209  CD2 TYR A 148     194.047 176.222  26.217  1.00 15.67      A    C
ATOM    210  CE2 TYR A 148     195.269 176.880  26.050  1.00 20.14      A    C
ATOM    211  CZ  TYR A 148     195.355 177.938  25.153  1.00 18.86      A    C
ATOM    212  OH  TYR A 148     196.555 178.569  24.934  1.00 23.63      A    O
ATOM    213  C   TYR A 148     189.943 174.234  24.936  1.00 13.13      A    C
ATOM    214  O   TYR A 148     188.942 174.674  24.386  1.00 14.07      A    O
ATOM    215  N   LEU A 149     189.887 173.265  25.831  1.00 11.62      A    N
ATOM    216  CA  LEU A 149     188.600 172.753  26.223  1.00 11.86      A    C
ATOM    217  CB  LEU A 149     188.787 171.466  27.003  1.00 10.50      A    C
ATOM    218  CG  LEU A 149     187.547 170.675  27.388  1.00 12.61      A    C
ATOM    219  CD1 LEU A 149     186.695 170.364  26.182  1.00 11.20      A    C
ATOM    220  CD2 LEU A 149     188.001 169.410  28.051  1.00 11.24      A    C
ATOM    221  C   LEU A 149     188.071 173.911  27.101  1.00 13.55      A    C
ATOM    222  O   LEU A 149     188.857 174.728  27.565  1.00 12.48      A    O
ATOM    223  N   ALA A 150     186.763 174.008  27.316  1.00 14.24      A    N
ATOM    224  CA  ALA A 150     186.227 175.102  28.120  1.00 15.20      A    C
ATOM    225  CB  ALA A 150     186.230 176.406  27.318  1.00 15.60      A    C
ATOM    226  C   ALA A 150     184.817 174.800  28.612  1.00 17.25      A    C
ATOM    227  O   ALA A 150     184.122 173.929  28.083  1.00 18.30      A    O
ATOM    228  N   ARG A 151     184.398 175.532  29.629  1.00 17.29      A    N
ATOM    229  CA  ARG A 151     183.091 175.334  30.215  1.00 19.70      A    C
ATOM    230  CB  ARG A 151     183.245 174.479  31.492  1.00 20.02      A    C
ATOM    231  CG  ARG A 151     181.977 174.102  32.258  1.00 26.58      A    C
ATOM    232  CD  ARG A 151     182.321 173.557  33.686  1.00 30.64      A    C
ATOM    233  NE  ARG A 151     183.235 172.405  33.673  1.00 32.15      A    N
ATOM    234  CZ  ARG A 151     182.900 171.151  33.348  1.00 33.18      A    C
ATOM    235  NH1 ARG A 151     181.644 170.851  33.004  1.00 33.09      A    N
ATOM    236  NH2 ARG A 151     183.831 170.190  33.362  1.00 31.48      A    N
ATOM    237  C   ARG A 151     182.516 176.707  30.518  1.00 20.61      A    C
ATOM    238  O   ARG A 151     183.158 177.560  31.163  1.00 19.62      A    O
ATOM    239  N   GLU A 152     181.315 176.939  30.006  1.00 21.84      A    N
ATOM    240  CA  GLU A 152     180.633 178.196  30.264  1.00 21.85      A    C
ATOM    241  CB  GLU A 152     179.401 178.298  29.377  1.00 26.06      A    C
ATOM    242  CG  GLU A 152     178.766 179.690  29.289  1.00 28.31      A    C
ATOM    243  CD  GLU A 152     177.996 180.078  30.543  1.00 32.60      A    C
ATOM    244  OE1 GLU A 152     178.576 180.804  31.391  1.00 33.50      A    O
ATOM    245  OE2 GLU A 152     176.821 179.650  30.679  1.00 29.24      A    O
ATOM    246  C   GLU A 152     180.252 178.091  31.742  1.00 21.10      A    C
ATOM    247  O   GLU A 152     179.661 177.102  32.172  1.00 19.62      A    O
ATOM    248  N   LYS A 153     180.613 179.114  32.504  1.00 21.06      A    N
ATOM    249  CA  LYS A 153     180.366 179.156  33.933  1.00 20.90      A    C
ATOM    250  CB  LYS A 153     180.996 180.417  34.513  1.00 20.37      A    C
ATOM    251  CG  LYS A 153     182.501 180.458  34.440  1.00 22.17      A    C
ATOM    252  CD  LYS A 153     183.063 181.720  35.091  1.00 21.22      A    C
ATOM    253  CE  LYS A 153     184.568 181.658  35.002  1.00 22.77      A    C
ATOM    254  NZ  LYS A 153     185.178 182.877  35.572  1.00 24.11      A    N
ATOM    255  C   LYS A 153     178.927 179.048  34.421  1.00 21.26      A    C
ATOM    256  O   LYS A 153     178.649 178.362  35.390  1.00 25.58      A    O
ATOM    257  N   GLN A 154     177.982 179.704  33.786  1.00 23.03      A    N
ATOM    258  CA  GLN A 154     176.639 179.579  34.330  1.00 23.96      A    C
ATOM    259  CB  GLN A 154     175.744 180.686  33.800  1.00 23.79      A    C
ATOM    260  CG  GLN A 154     176.125 182.053  34.288  1.00 24.55      A    C
ATOM    261  CD  GLN A 154     175.243 183.133  33.709  1.00 24.55      A    C
ATOM    262  OE1 GLN A 154     175.674 184.283  33.617  1.00 23.87      A    O
ATOM    263  NE2 GLN A 154     173.998 182.779  33.309  1.00 22.50      A    N
ATOM    264  C   GLN A 154     175.951 178.229  34.086  1.00 24.10      A    C
ATOM    265  O   GLN A 154     175.345 177.675  34.996  1.00 25.34      A    O
ATOM    266  N   SER A 155     176.018 177.700  32.871  1.00 22.36      A    N
ATOM    267  CA  SER A 155     175.351 176.441  32.585  1.00 21.24      A    C
ATOM    268  CB  SER A 155     174.790 176.517  31.180  1.00 20.38      A    C
ATOM    269  OG  SER A 155     175.875 176.607  30.282  1.00 22.24      A    O
ATOM    270  C   SER A 155     176.234 175.182  32.691  1.00 23.66      A    C
ATOM    271  O   SER A 155     175.725 174.048  32.677  1.00 20.04      A    O
ATOM    272  N   LYS A 156     177.549 175.406  32.789  1.00 23.61      A    N
ATOM    273  CA  LYS A 156     178.572 174.358  32.849  1.00 24.47      A    C
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ATOM    274  CB  LYS A 156     178.350 173.467  34.065  1.00 25.24      A    C
ATOM    275  CG  LYS A 156     178.523 174.254  35.368  1.00 32.64      A    C
ATOM    276  CD  LYS A 156     178.309 173.358  36.552  1.00 35.73      A    C
ATOM    277  CE  LYS A 156     178.506 174.079  37.870  1.00 41.50      A    C
ATOM    278  NZ  LYS A 156     178.457 173.059  38.978  1.00 42.75      A    N
ATOM    279  C   LYS A 156     178.634 173.543  31.548  1.00 22.03      A    C
ATOM    280  O   LYS A 156     179.131 172.417  31.509  1.00 22.31      A    O
ATOM    281  N   PHE A 157     178.152 174.152  30.472  1.00 20.94      A    N
ATOM    282  CA  PHE A 157     178.180 173.530  29.162  1.00 19.88      A    C
ATOM    283  CB  PHE A 157     177.370 174.367  28.174  1.00 21.87      A    C
ATOM    284  CG  PHE A 157     177.209 173.735  26.840  1.00 22.62      A    C
ATOM    285  CD1 PHE A 157     176.501 172.546  26.704  1.00 26.84      A    C
ATOM    286  CD2 PHE A 157     177.745 174.336  25.707  1.00 24.18      A    C
ATOM    287  CE1 PHE A 157     176.326 171.957  25.448  1.00 27.13      A    C
ATOM    288  CE2 PHE A 157     177.576 173.763  24.446  1.00 24.84      A    C
ATOM    289  CZ  PHE A 157     176.868 172.574  24.316  1.00 26.19      A    C
ATOM    290  C   PHE A 157     179.645 173.447  28.708  1.00 20.86      A    C
ATOM    291  O   PHE A 157     180.394 174.451  28.739  1.00 16.68      A    O
ATOM    292  N   ILE A 158     180.056 172.243  28.316  1.00 18.62      A    N
ATOM    293  CA  ILE A 158     181.412 171.997  27.862  1.00 17.65      A    C
ATOM    294  CB  ILE A 158     181.818 170.521  28.156  1.00 21.22      A    C
ATOM    295  CG2 ILE A 158     183.120 170.183  27.472  1.00 20.54      A    C
ATOM    296  CG1 ILE A 158     181.998 170.339  29.675  1.00 25.44      A    C
ATOM    297  CD1 ILE A 158     181.751 168.898  30.193  1.00 32.22      A    C
ATOM    298  C   ILE A 158     181.502 172.306  26.363  1.00 19.32      A    C
ATOM    299  O   ILE A 158     180.622 171.940  25.588  1.00 21.25      A    O
ATOM    300  N   LEU A 159     182.544 173.021  25.958  1.00 19.68      A    N
ATOM    301  CA  LEU A 159     182.729 173.365  24.552  1.00 18.03      A    C
ATOM    302  CB  LEU A 159     181.915 174.625  24.214  1.00 18.70      A    C
ATOM    303  CG  LEU A 159     181.855 175.726  25.275  1.00 18.81      A    C
ATOM    304  CD1 LEU A 159     183.137 176.522  25.197  1.00 25.89      A    C
ATOM    305  CD2 LEU A 159     180.667 176.644  25.065  1.00 15.33      A    C
ATOM    306  C   LEU A 159     184.218 173.553  24.263  1.00 16.64      A    C
ATOM    307  O   LEU A 159     185.054 173.211  25.099  1.00 10.64      A    O
ATOM    308  N   ALA A 160     184.562 174.069  23.084  1.00 14.09      A    N
ATOM    309  CA  ALA A 160     185.981 174.271  22.742  1.00 14.90      A    C
ATOM    310  CB  ALA A 160     186.371 173.394  21.574  1.00 11.94      A    C
ATOM    311  C   ALA A 160     186.230 175.736  22.420  1.00 15.35      A    C
ATOM    312  O   ALA A 160     185.419 176.377  21.777  1.00 16.22      A    O
ATOM    313  N   LEU A 161     187.348 176.277  22.876  1.00 17.51      A    N
ATOM    314  CA  LEU A 161     187.656 177.685  22.636  1.00 17.81      A    C
ATOM    315  CB  LEU A 161     187.959 178.379  23.958  1.00 19.09      A    C
ATOM    316  CG  LEU A 161     187.661 179.882  24.003  1.00 24.28      A    C
ATOM    317  CD1 LEU A 161     186.190 180.085  23.715  1.00 19.74      A    C
ATOM    318  CD2 LEU A 161     188.020 180.482  25.396  1.00 26.64      A    C
ATOM    319  C   LEU A 161     188.857 177.829  21.697  1.00 18.94      A    C
ATOM    320  O   LEU A 161     189.984 177.506  22.070  1.00 15.15      A    O
ATOM    321  N   LYS A 162     188.605 178.302  20.477  1.00 15.44      A    N
ATOM    322  CA  LYS A 162     189.671 178.489  19.506  1.00 16.27      A    C
ATOM    323  CB  LYS A 162     189.142 178.254  18.093  1.00 15.06      A    C
ATOM    324  CG  LYS A 162     190.184 178.338  17.036  1.00 13.12      A    C
ATOM    325  CD  LYS A 162     189.615 177.968  15.682  1.00 15.23      A    C
ATOM    326  CE  LYS A 162     190.694 178.025  14.590  1.00 15.94      A    C
ATOM    327  NZ  LYS A 162     190.118 177.625  13.262  1.00 21.75      A    N
ATOM    328  C   LYS A 162     190.220 179.909  19.626  1.00 16.04      A    C
ATOM    329  O   LYS A 162     189.486 180.863  19.427  1.00 17.16      A    O
ATOM    330  N   VAL A 163     191.501 180.044  19.955  1.00 15.21      A    N
ATOM    331  CA  VAL A 163     192.110 181.357  20.107  1.00 16.50      A    C
ATOM    332  CB  VAL A 163     193.047 181.400  21.336  1.00 17.79      A    C
ATOM    333  CG1 VAL A 163     193.563 182.816  21.546  1.00 15.20      A    C
ATOM    334  CG2 VAL A 163     192.316 180.897  22.578  1.00 14.92      A    C
ATOM    335  C   VAL A 163     192.938 181.758  18.888  1.00 17.82      A    C
ATOM    336  O   VAL A 163     193.616 180.933  18.287  1.00 20.09      A    O
ATOM    337  N   LEU A 164     192.888 183.028  18.522  1.00 18.13      A    N
ATOM    338  CA  LEU A 164     193.670 183.509  17.387  1.00 15.87      A    C
ATOM    339  CB  LEU A 164     192.747 183.802  16.203  1.00 18.86      A    C
ATOM    340  CG  LEU A 164     191.903 182.603  15.752  1.00 20.75      A    C
ATOM    341  CD1 LEU A 164     190.429 182.980  15.575  1.00 23.26      A    C
ATOM    342  CD2 LEU A 164     192.481 182.084  14.477  1.00 19.09      A    C
ATOM    343  C   LEU A 164     194.352 184.789  17.835  1.00 16.04      A    C
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ATOM	344	O	LEU	A	164	193.687	185.709	18.295	1.00	13.41	A	O
ATOM	345	N	PHE	A	165	195.670	184.858	17.738	1.00	15.52	A	N
ATOM	346	CA	PHE	A	165	196.340	186.082	18.141	1.00	18.33	A	C
ATOM	347	CB	PHE	A	165	197.804	185.823	18.497	1.00	19.71	A	C
ATOM	348	CG	PHE	A	165	197.987	185.214	19.850	1.00	26.23	A	C
ATOM	349	CD1	PHE	A	165	197.826	183.840	20.033	1.00	27.06	A	C
ATOM	350	CD2	PHE	A	165	198.222	186.025	20.961	1.00	28.47	A	C
ATOM	351	CE1	PHE	A	165	197.899	183.281	21.298	1.00	32.07	A	C
ATOM	352	CE2	PHE	A	165	198.299	185.479	22.239	1.00	31.56	A	C
ATOM	353	CZ	PHE	A	165	198.133	184.104	22.411	1.00	35.02	A	C
ATOM	354	C	PHE	A	165	196.228	187.062	16.989	1.00	19.49	A	C
ATOM	355	O	PHE	A	165	196.610	186.742	15.857	1.00	21.60	A	O
ATOM	356	N	LYS	A	166	195.674	188.242	17.277	1.00	18.17	A	N
ATOM	357	CA	LYS	A	166	195.458	189.299	16.282	1.00	17.63	A	C
ATOM	358	CB	LYS	A	166	194.786	190.520	16.931	1.00	16.68	A	C
ATOM	359	CG	LYS	A	166	193.319	190.346	17.376	1.00	15.54	A	C
ATOM	360	CD	LYS	A	166	192.703	191.672	17.826	1.00	10.39	A	C
ATOM	361	CE	LYS	A	166	191.259	191.452	18.272	1.00	12.43	A	C
ATOM	362	NZ	LYS	A	166	190.505	192.644	18.792	1.00	7.46	A	N
ATOM	363	C	LYS	A	166	196.696	189.792	15.536	1.00	19.44	A	C
ATOM	364	O	LYS	A	166	196.615	190.103	14.343	1.00	19.53	A	O
ATOM	365	N	ALA	A	167	197.828	189.885	16.237	1.00	19.10	A	N
ATOM	366	CA	ALA	A	167	199.068	190.369	15.628	1.00	18.82	A	C
ATOM	367	CB	ALA	A	167	200.140	190.591	16.710	1.00	11.48	A	C
ATOM	368	C	ALA	A	167	199.551	189.377	14.571	1.00	18.71	A	C
ATOM	369	O	ALA	A	167	200.085	189.762	13.534	1.00	19.61	A	O
ATOM	370	N	GLN	A	168	199.351	188.092	14.840	1.00	18.71	A	N
ATOM	371	CA	GLN	A	168	199.734	187.039	13.907	1.00	18.86	A	C
ATOM	372	CB	GLN	A	168	199.584	185.666	14.561	1.00	21.65	A	C
ATOM	373	CG	GLN	A	168	200.584	184.664	14.014	1.00	25.64	A	C
ATOM	374	CD	GLN	A	168	200.544	183.310	14.690	1.00	29.19	A	C
ATOM	375	OE1	GLN	A	168	200.269	183.208	15.900	1.00	27.17	A	O
ATOM	376	NE2	GLN	A	168	200.846	182.249	13.920	1.00	28.74	A	N
ATOM	377	C	GLN	A	168	198.824	187.137	12.688	1.00	17.82	A	C
ATOM	378	O	GLN	A	168	199.273	187.079	11.560	1.00	20.56	A	O
ATOM	379	N	LEU	A	169	197.530	187.289	12.931	1.00	19.46	A	N
ATOM	380	CA	LEU	A	169	196.553	187.404	11.848	1.00	19.86	A	C
ATOM	381	CB	LEU	A	169	195.146	187.572	12.393	1.00	20.65	A	C
ATOM	382	CG	LEU	A	169	194.514	186.370	13.052	1.00	24.58	A	C
ATOM	383	CD1	LEU	A	169	193.168	186.837	13.566	1.00	23.53	A	C
ATOM	384	CD2	LEU	A	169	194.396	185.189	12.069	1.00	20.67	A	C
ATOM	385	C	LEU	A	169	196.802	188.604	10.961	1.00	21.12	A	C
ATOM	386	O	LEU	A	169	196.533	188.564	9.761	1.00	17.39	A	O
ATOM	387	N	GLU	A	170	197.261	189.697	11.564	1.00	22.51	A	N
ATOM	388	CA	GLU	A	170	197.520	190.915	10.807	1.00	23.02	A	C
ATOM	389	CB	GLU	A	170	197.637	192.102	11.769	1.00	22.68	A	C
ATOM	390	CG	GLU	A	170	196.267	192.607	12.232	1.00	27.99	A	C
ATOM	391	CD	GLU	A	170	196.294	193.330	13.579	1.00	31.84	A	C
ATOM	392	OE1	GLU	A	170	197.334	193.955	13.920	1.00	33.33	A	O
ATOM	393	OE2	GLU	A	170	195.256	193.278	14.285	1.00	31.22	A	O
ATOM	394	C	GLU	A	170	198.762	190.753	9.949	1.00	21.03	A	C
ATOM	395	O	GLU	A	170	198.739	191.068	8.757	1.00	23.09	A	O
ATOM	396	N	LYS	A	171	199.826	190.220	10.535	1.00	17.25	A	N
ATOM	397	CA	LYS	A	171	201.059	190.014	9.790	1.00	19.63	A	C
ATOM	398	CB	LYS	A	171	202.139	189.442	10.706	1.00	21.18	A	C
ATOM	399	CG	LYS	A	171	203.525	189.395	10.073	1.00	25.15	A	C
ATOM	400	CD	LYS	A	171	204.574	188.888	11.054	1.00	28.24	A	C
ATOM	401	CE	LYS	A	171	205.952	188.807	10.395	1.00	32.60	A	C
ATOM	402	NZ	LYS	A	171	207.003	188.297	11.331	1.00	33.23	A	N
ATOM	403	C	LYS	A	171	200.838	189.074	8.609	1.00	19.42	A	C
ATOM	404	O	LYS	A	171	201.451	189.235	7.551	1.00	21.92	A	O
ATOM	405	N	ALA	A	172	199.957	188.095	8.782	1.00	17.92	A	N
ATOM	406	CA	ALA	A	172	199.666	187.126	7.720	1.00	18.61	A	C
ATOM	407	CB	ALA	A	172	199.168	185.826	8.341	1.00	13.39	A	C
ATOM	408	C	ALA	A	172	198.666	187.627	6.679	1.00	16.48	A	C
ATOM	409	O	ALA	A	172	198.600	187.082	5.577	1.00	18.45	A	O
ATOM	410	N	GLY	A	173	197.890	188.651	7.053	1.00	16.48	A	N
ATOM	411	CA	GLY	A	173	196.876	189.241	6.178	1.00	17.37	A	C
ATOM	412	C	GLY	A	173	195.719	188.297	5.904	1.00	18.48	A	C
ATOM	413	O	GLY	A	173	195.158	188.264	4.789	1.00	17.50	A	O

ATOM	414	N	VAL	A	174	195.344	187.536	6.921	1.00	16.39	A	N
ATOM	415	CA	VAL	A	174	194.274	186.573	6.770	1.00	18.80	A	C
ATOM	416	CB	VAL	A	174	194.778	185.171	7.226	1.00	17.75	A	C
ATOM	417	CG1	VAL	A	174	195.976	184.770	6.371	1.00	17.03	A	C
ATOM	418	CG2	VAL	A	174	195.166	185.207	8.684	1.00	12.69	A	C
ATOM	419	C	VAL	A	174	193.015	186.982	7.535	1.00	19.69	A	C
ATOM	420	O	VAL	A	174	192.152	186.152	7.828	1.00	22.14	A	O
ATOM	421	N	GLU	A	175	192.900	188.282	7.801	1.00	24.29	A	N
ATOM	422	CA	GLU	A	175	191.751	188.834	8.521	1.00	25.76	A	C
ATOM	423	CB	GLU	A	175	191.902	190.351	8.799	1.00	29.22	A	C
ATOM	424	CG	GLU	A	175	193.333	190.938	8.903	1.00	38.41	A	C
ATOM	425	CD	GLU	A	175	193.998	191.112	7.548	1.00	39.97	A	C
ATOM	426	OE1	GLU	A	175	193.310	190.986	6.511	1.00	47.49	A	O
ATOM	427	OE2	GLU	A	175	195.206	191.382	7.507	1.00	46.22	A	O
ATOM	428	C	GLU	A	175	190.452	188.611	7.752	1.00	25.95	A	C
ATOM	429	O	GLU	A	175	189.423	188.313	8.337	1.00	25.42	A	O
ATOM	430	N	HIS	A	176	190.483	188.768	6.438	1.00	26.45	A	N
ATOM	431	CA	HIS	A	176	189.254	188.539	5.708	1.00	24.68	A	C
ATOM	432	CB	HIS	A	176	189.316	189.074	4.278	1.00	23.09	A	C
ATOM	433	CG	HIS	A	176	187.983	189.014	3.596	1.00	32.41	A	C
ATOM	434	CD2	HIS	A	176	187.570	188.363	2.477	1.00	34.18	A	C
ATOM	435	ND1	HIS	A	176	186.845	189.576	4.148	1.00	32.75	A	N
ATOM	436	CE1	HIS	A	176	185.796	189.266	3.406	1.00	33.74	A	C
ATOM	437	NE2	HIS	A	176	186.207	188.529	2.386	1.00	34.72	A	N
ATOM	438	C	HIS	A	176	188.848	187.062	5.703	1.00	23.32	A	C
ATOM	439	O	HIS	A	176	187.661	186.755	5.693	1.00	22.64	A	O
ATOM	440	N	GLN	A	177	189.803	186.137	5.744	1.00	21.78	A	N
ATOM	441	CA	GLN	A	177	189.432	184.721	5.774	1.00	19.85	A	C
ATOM	442	CB	GLN	A	177	190.628	183.818	5.421	1.00	21.23	A	C
ATOM	443	CG	GLN	A	177	191.173	183.994	3.977	1.00	23.08	A	C
ATOM	444	CD	GLN	A	177	192.113	185.179	3.856	1.00	26.14	A	C
ATOM	445	OE1	GLN	A	177	191.901	186.204	4.512	1.00	27.02	A	O
ATOM	446	NE2	GLN	A	177	193.161	185.056	3.012	1.00	25.09	A	N
ATOM	447	C	GLN	A	177	188.859	184.317	7.129	1.00	18.66	A	C
ATOM	448	O	GLN	A	177	188.057	183.390	7.195	1.00	18.16	A	O
ATOM	449	N	LEU	A	178	189.267	185.001	8.202	1.00	17.80	A	N
ATOM	450	CA	LEU	A	178	188.742	184.695	9.532	1.00	17.25	A	C
ATOM	451	CB	LEU	A	178	189.473	185.495	10.616	1.00	14.48	A	C
ATOM	452	CG	LEU	A	178	188.948	185.297	12.041	1.00	14.78	A	C
ATOM	453	CD1	LEU	A	178	188.822	183.792	12.391	1.00	13.65	A	C
ATOM	454	CD2	LEU	A	178	189.904	185.964	13.002	1.00	15.52	A	C
ATOM	455	C	LEU	A	178	187.257	185.050	9.569	1.00	18.82	A	C
ATOM	456	O	LEU	A	178	186.436	184.346	10.148	1.00	18.56	A	O
ATOM	457	N	ARG	A	179	186.929	186.171	8.950	1.00	17.14	A	N
ATOM	458	CA	ARG	A	179	185.570	186.637	8.893	1.00	20.36	A	C
ATOM	459	CB	ARG	A	179	185.547	188.004	8.238	1.00	24.60	A	C
ATOM	460	CG	ARG	A	179	184.191	188.581	8.190	1.00	30.51	A	C
ATOM	461	CD	ARG	A	179	184.079	189.355	6.937	1.00	34.92	A	C
ATOM	462	NE	ARG	A	179	183.602	190.700	7.192	1.00	44.42	A	N
ATOM	463	CZ	ARG	A	179	184.338	191.679	7.721	1.00	50.64	A	C
ATOM	464	NH1	ARG	A	179	185.609	191.475	8.060	1.00	53.62	A	N
ATOM	465	NH2	ARG	A	179	183.800	192.881	7.910	1.00	54.27	A	N
ATOM	466	C	ARG	A	179	184.677	185.663	8.112	1.00	20.68	A	C
ATOM	467	O	ARG	A	179	183.516	185.428	8.490	1.00	20.49	A	O
ATOM	468	N	ARG	A	180	185.211	185.102	7.027	1.00	16.87	A	N
ATOM	469	CA	ARG	A	180	184.457	184.139	6.240	1.00	16.27	A	C
ATOM	470	CB	ARG	A	180	185.145	183.851	4.880	1.00	15.64	A	C
ATOM	471	CG	ARG	A	180	185.036	184.997	3.869	1.00	19.03	A	C
ATOM	472	CD	ARG	A	180	185.243	184.593	2.394	1.00	19.17	A	C
ATOM	473	NE	ARG	A	180	186.536	183.973	2.158	1.00	22.25	A	N
ATOM	474	CZ	ARG	A	180	187.223	184.003	1.011	1.00	22.42	A	C
ATOM	475	NH1	ARG	A	180	186.778	184.633	-0.067	1.00	16.67	A	N
ATOM	476	NH2	ARG	A	180	188.390	183.384	0.949	1.00	23.03	A	N
ATOM	477	C	ARG	A	180	184.277	182.837	7.037	1.00	16.14	A	C
ATOM	478	O	ARG	A	180	183.225	182.207	6.950	1.00	17.78	A	O
ATOM	479	N	GLU	A	181	185.294	182.439	7.812	1.00	15.13	A	N
ATOM	480	CA	GLU	A	181	185.211	181.222	8.627	1.00	15.82	A	C
ATOM	481	CB	GLU	A	181	186.512	180.969	9.431	1.00	17.60	A	C
ATOM	482	CG	GLU	A	181	186.517	179.610	10.164	1.00	22.11	A	C
ATOM	483	CD	GLU	A	181	187.779	179.293	11.023	1.00	29.50	A	C

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ATOM    484  OE1 GLU A 181     188.877 179.898  10.811  1.00 23.91      A    O
ATOM    485  OE2 GLU A 181     187.654 178.393  11.914  1.00 30.52      A    O
ATOM    486  C   GLU A 181     184.059 181.374   9.615  1.00 17.24      A    C
ATOM    487  O   GLU A 181     183.169 180.514   9.711  1.00 17.81      A    O
ATOM    488  N   VAL A 182     184.075 182.486  10.336  1.00 13.24      A    N
ATOM    489  CA  VAL A 182     183.056 182.746  11.323  1.00 16.10      A    C
ATOM    490  CB  VAL A 182     183.417 183.989  12.155  1.00 17.20      A    C
ATOM    491  CG1 VAL A 182     182.271 184.362  13.059  1.00 11.33      A    C
ATOM    492  CG2 VAL A 182     184.675 183.709  12.948  1.00 15.06      A    C
ATOM    493  C   VAL A 182     181.650 182.907  10.756  1.00 16.14      A    C
ATOM    494  O   VAL A 182     180.718 182.216  11.186  1.00 14.19      A    O
ATOM    495  N   GLU A 183     181.491 183.805   9.788  1.00 16.25      A    N
ATOM    496  CA  GLU A 183     180.162 184.021   9.212  1.00 17.30      A    C
ATOM    497  CB  GLU A 183     180.190 185.187   8.214  1.00 16.51      A    C
ATOM    498  CG  GLU A 183     180.630 186.499   8.842  1.00 21.63      A    C
ATOM    499  CD  GLU A 183     180.566 187.674   7.874  1.00 24.47      A    C
ATOM    500  OE1 GLU A 183     180.841 187.477   6.673  1.00 27.21      A    O
ATOM    501  OE2 GLU A 183     180.255 188.801   8.315  1.00 29.43      A    O
ATOM    502  C   GLU A 183     179.581 182.764   8.555  1.00 14.99      A    C
ATOM    503  O   GLU A 183     178.405 182.460   8.753  1.00 16.33      A    O
ATOM    504  N   ILE A 184     180.396 182.019   7.810  1.00 12.00      A    N
ATOM    505  CA  ILE A 184     179.908 180.808   7.159  1.00 10.45      A    C
ATOM    506  CB  ILE A 184     180.904 180.302   6.094  1.00  9.02      A    C
ATOM    507  CG2 ILE A 184     180.595 178.854   5.712  1.00  2.93      A    C
ATOM    508  CG1 ILE A 184     180.862 181.248   4.893  1.00  4.36      A    C
ATOM    509  CD1 ILE A 184     182.025 181.076   3.939  1.00  5.66      A    C
ATOM    510  C   ILE A 184     179.633 179.675   8.149  1.00 12.74      A    C
ATOM    511  O   ILE A 184     178.552 179.077   8.135  1.00 13.03      A    O
ATOM    512  N   GLN A 185     180.585 179.380   9.026  1.00 14.41      A    N
ATOM    513  CA  GLN A 185     180.365 178.279   9.960  1.00 15.94      A    C
ATOM    514  CB  GLN A 185     181.663 177.933  10.682  1.00 15.68      A    C
ATOM    515  CG  GLN A 185     181.684 176.556  11.281  1.00 15.22      A    C
ATOM    516  CD  GLN A 185     182.955 176.333  12.074  1.00 16.62      A    C
ATOM    517  OE1 GLN A 185     183.844 177.184  12.072  1.00 19.84      A    O
ATOM    518  NE2 GLN A 185     183.048 175.198  12.760  1.00 15.50      A    N
ATOM    519  C   GLN A 185     179.257 178.551  10.977  1.00 14.85      A    C
ATOM    520  O   GLN A 185     178.507 177.637  11.339  1.00 11.63      A    O
ATOM    521  N   SER A 186     179.134 179.798  11.424  1.00 14.21      A    N
ATOM    522  CA  SER A 186     178.102 180.102  12.421  1.00 15.30      A    C
ATOM    523  CB  SER A 186     178.265 181.527  13.028  1.00 15.24      A    C
ATOM    524  OG  SER A 186     178.146 182.584  12.086  1.00 16.11      A    O
ATOM    525  C   SER A 186     176.686 179.916  11.898  1.00 15.48      A    C
ATOM    526  O   SER A 186     175.787 179.612  12.672  1.00 20.12      A    O
ATOM    527  N   HIS A 187     176.483 180.048  10.592  1.00 15.79      A    N
ATOM    528  CA  HIS A 187     175.153 179.908  10.018  1.00 15.76      A    C
ATOM    529  CB  HIS A 187     174.964 180.942   8.914  1.00 14.22      A    C
ATOM    530  CG  HIS A 187     174.857 182.348   9.414  1.00 14.55      A    C
ATOM    531  CD2 HIS A 187     173.787 183.070   9.816  1.00 12.55      A    C
ATOM    532  ND1 HIS A 187     175.944 183.189   9.516  1.00 13.11      A    N
ATOM    533  CE1 HIS A 187     175.548 184.369   9.951  1.00 10.14      A    C
ATOM    534  NE2 HIS A 187     174.243 184.324  10.140  1.00 15.06      A    N
ATOM    535  C   HIS A 187     174.838 178.515   9.469  1.00 17.67      A    C
ATOM    536  O   HIS A 187     173.762 178.272   8.931  1.00 17.40      A    O
ATOM    537  N   LEU A 188     175.777 177.595   9.616  1.00 18.89      A    N
ATOM    538  CA  LEU A 188     175.608 176.243   9.118  1.00 16.21      A    C
ATOM    539  CB  LEU A 188     176.972 175.721   8.652  1.00 15.40      A    C
ATOM    540  CG  LEU A 188     177.339 175.433   7.185  1.00 14.79      A    C
ATOM    541  CD1 LEU A 188     176.514 176.200   6.155  1.00 14.64      A    C
ATOM    542  CD2 LEU A 188     178.805 175.738   7.024  1.00 11.29      A    C
ATOM    543  C   LEU A 188     175.047 175.408  10.266  1.00 17.59      A    C
ATOM    544  O   LEU A 188     175.382 175.630  11.423  1.00 19.21      A    O
ATOM    545  N   ARG A 189     174.174 174.458   9.955  1.00 19.36      A    N
ATOM    546  CA  ARG A 189     173.579 173.603  10.988  1.00 21.36      A    C
ATOM    547  CB  ARG A 189     172.190 174.086  11.398  1.00 22.58      A    C
ATOM    548  CG  ARG A 189     172.131 175.420  12.110  1.00 32.57      A    C
ATOM    549  CD  ARG A 189     172.277 175.274  13.621  1.00 34.83      A    C
ATOM    550  NE  ARG A 189     172.168 176.568  14.298  1.00 40.56      A    N
ATOM    551  CZ  ARG A 189     172.993 177.598  14.091  1.00 43.35      A    C
ATOM    552  NH1 ARG A 189     173.993 177.481  13.215  1.00 42.31      A    N
ATOM    553  NH2 ARG A 189     172.827 178.740  14.770  1.00 42.32      A    N
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ATOM	554	C	ARG A 189	173.423	172.219	10.415	1.00	19.45	A	C
ATOM	555	O	ARG A 189	172.582	171.996	9.558	1.00	19.37	A	O
ATOM	556	N	HIS A 190	174.218	171.283	10.900	1.00	16.48	A	N
ATOM	557	CA	HIS A 190	174.148	169.936	10.388	1.00	16.32	A	C
ATOM	558	CB	HIS A 190	174.865	169.868	9.042	1.00	13.06	A	C
ATOM	559	CG	HIS A 190	174.848	168.517	8.403	1.00	8.96	A	C
ATOM	560	CD2	HIS A 190	175.640	167.430	8.584	1.00	9.19	A	C
ATOM	561	ND1	HIS A 190	173.942	168.169	7.422	1.00	9.60	A	N
ATOM	562	CE1	HIS A 190	174.177	166.929	7.026	1.00	8.25	A	C
ATOM	563	NE2	HIS A 190	175.202	166.456	7.717	1.00	10.48	A	N
ATOM	564	C	HIS A 190	174.857	169.069	11.409	1.00	18.77	A	C
ATOM	565	O	HIS A 190	175.747	169.538	12.110	1.00	19.58	A	O
ATOM	566	N	PRO A 191	174.437	167.797	11.526	1.00	19.81	A	N
ATOM	567	CD	PRO A 191	173.236	167.329	10.808	1.00	18.67	A	C
ATOM	568	CA	PRO A 191	174.946	166.749	12.430	1.00	18.82	A	C
ATOM	569	CB	PRO A 191	174.058	165.545	12.108	1.00	15.98	A	C
ATOM	570	CG	PRO A 191	172.813	166.147	11.615	1.00	19.49	A	C
ATOM	571	C	PRO A 191	176.422	166.383	12.239	1.00	15.63	A	C
ATOM	572	O	PRO A 191	177.074	165.908	13.167	1.00	16.18	A	O
ATOM	573	N	ASN A 192	176.930	166.564	11.029	1.00	13.38	A	N
ATOM	574	CA	ASN A 192	178.306	166.216	10.740	1.00	13.06	A	C
ATOM	575	CB	ASN A 192	178.367	165.242	9.568	1.00	16.94	A	C
ATOM	576	CG	ASN A 192	177.621	163.963	9.853	1.00	21.40	A	C
ATOM	577	OD1	ASN A 192	176.478	163.790	9.431	1.00	24.81	A	O
ATOM	578	ND2	ASN A 192	178.255	163.062	10.596	1.00	19.25	A	N
ATOM	579	C	ASN A 192	179.189	167.407	10.467	1.00	13.65	A	C
ATOM	580	O	ASN A 192	180.258	167.276	9.869	1.00	15.58	A	O
ATOM	581	N	ILE A 193	178.725	168.584	10.865	1.00	13.34	A	N
ATOM	582	CA	ILE A 193	179.529	169.789	10.734	1.00	12.06	A	C
ATOM	583	CB	ILE A 193	178.886	170.843	9.814	1.00	11.35	A	C
ATOM	584	CG2	ILE A 193	179.688	172.131	9.882	1.00	5.81	A	C
ATOM	585	CG1	ILE A 193	178.807	170.317	8.381	1.00	6.17	A	C
ATOM	586	CD1	ILE A 193	178.045	171.205	7.453	1.00	8.69	A	C
ATOM	587	C	ILE A 193	179.651	170.377	12.134	1.00	12.85	A	C
ATOM	588	O	ILE A 193	178.663	170.540	12.840	1.00	14.90	A	O
ATOM	589	N	LEU A 194	180.874	170.678	12.530	1.00	13.66	A	N
ATOM	590	CA	LEU A 194	181.123	171.253	13.839	1.00	14.76	A	C
ATOM	591	CB	LEU A 194	182.623	171.519	14.036	1.00	16.68	A	C
ATOM	592	CG	LEU A 194	183.117	171.537	15.486	1.00	15.84	A	C
ATOM	593	CD1	LEU A 194	183.039	170.099	16.000	1.00	14.02	A	C
ATOM	594	CD2	LEU A 194	184.545	172.073	15.588	1.00	14.49	A	C
ATOM	595	C	LEU A 194	180.381	172.578	13.964	1.00	16.81	A	C
ATOM	596	O	LEU A 194	180.450	173.433	13.070	1.00	18.34	A	O
ATOM	597	N	ARG A 195	179.683	172.727	15.085	1.00	15.08	A	N
ATOM	598	CA	ARG A 195	178.924	173.924	15.390	1.00	16.45	A	C
ATOM	599	CB	ARG A 195	177.878	173.634	16.474	1.00	19.44	A	C
ATOM	600	CG	ARG A 195	176.596	172.975	15.987	1.00	25.93	A	C
ATOM	601	CD	ARG A 195	175.746	173.967	15.232	1.00	29.82	A	C
ATOM	602	NE	ARG A 195	174.811	174.694	16.091	1.00	36.41	A	N
ATOM	603	CZ	ARG A 195	174.859	176.008	16.302	1.00	39.91	A	C
ATOM	604	NH1	ARG A 195	175.804	176.729	15.718	1.00	44.61	A	N
ATOM	605	NH2	ARG A 195	173.958	176.608	17.075	1.00	40.14	A	N
ATOM	606	C	ARG A 195	179.787	175.113	15.870	1.00	16.17	A	C
ATOM	607	O	ARG A 195	180.714	174.950	16.656	1.00	13.03	A	O
ATOM	608	N	LEU A 196	179.471	176.293	15.341	1.00	17.85	A	N
ATOM	609	CA	LEU A 196	180.114	177.536	15.749	1.00	16.50	A	C
ATOM	610	CB	LEU A 196	180.623	178.380	14.572	1.00	13.17	A	C
ATOM	611	CG	LEU A 196	181.348	179.669	14.959	1.00	15.31	A	C
ATOM	612	CD1	LEU A 196	182.467	179.277	15.910	1.00	13.98	A	C
ATOM	613	CD2	LEU A 196	181.922	180.404	13.749	1.00	12.29	A	C
ATOM	614	C	LEU A 196	178.975	178.281	16.466	1.00	15.90	A	C
ATOM	615	O	LEU A 196	178.037	178.767	15.839	1.00	15.06	A	O
ATOM	616	N	TYR A 197	179.062	178.337	17.791	1.00	18.19	A	N
ATOM	617	CA	TYR A 197	178.049	178.974	18.610	1.00	18.38	A	C
ATOM	618	CB	TYR A 197	178.154	178.464	20.033	1.00	15.79	A	C
ATOM	619	CG	TYR A 197	177.908	176.980	20.126	1.00	17.64	A	C
ATOM	620	CD1	TYR A 197	178.955	176.080	20.280	1.00	15.26	A	C
ATOM	621	CE1	TYR A 197	178.712	174.718	20.364	1.00	20.64	A	C
ATOM	622	CD2	TYR A 197	176.607	176.469	20.054	1.00	21.32	A	C
ATOM	623	CE2	TYR A 197	176.360	175.104	20.138	1.00	20.23	A	C

ATOM	624	CZ	TYR	A	197	177.418	174.242	20.293	1.00	20.94	A C
ATOM	625	OH	TYR	A	197	177.185	172.900	20.387	1.00	26.42	A O
ATOM	626	C	TYR	A	197	178.174	180.481	18.561	1.00	19.88	A C
ATOM	627	O	TYR	A	197	177.180	181.193	18.454	1.00	19.95	A O
ATOM	628	N	GLY	A	198	179.394	180.985	18.611	1.00	20.35	A N
ATOM	629	CA	GLY	A	198	179.542	182.425	18.562	1.00	20.00	A C
ATOM	630	C	GLY	A	198	180.984	182.838	18.642	1.00	17.90	A C
ATOM	631	O	GLY	A	198	181.874	182.005	18.677	1.00	19.17	A O
ATOM	632	N	TYR	A	199	181.222	184.134	18.686	1.00	17.72	A N
ATOM	633	CA	TYR	A	199	182.589	184.593	18.748	1.00	19.93	A C
ATOM	634	CB	TYR	A	199	183.128	184.776	17.325	1.00	19.83	A C
ATOM	635	CG	TYR	A	199	182.894	186.166	16.788	1.00	21.41	A C
ATOM	636	CD1	TYR	A	199	183.892	187.135	16.885	1.00	21.65	A C
ATOM	637	CE1	TYR	A	199	183.677	188.430	16.486	1.00	22.65	A C
ATOM	638	CD2	TYR	A	199	181.660	186.538	16.266	1.00	18.59	A C
ATOM	639	CE2	TYR	A	199	181.426	187.841	15.862	1.00	22.04	A C
ATOM	640	CZ	TYR	A	199	182.439	188.787	15.972	1.00	23.54	A C
ATOM	641	OH	TYR	A	199	182.223	190.089	15.557	1.00	24.04	A O
ATOM	642	C	TYR	A	199	182.693	185.910	19.508	1.00	19.03	A C
ATOM	643	O	TYR	A	199	181.703	186.618	19.699	1.00	19.48	A O
ATOM	644	N	PHE	A	200	183.910	186.238	19.920	1.00	18.13	A N
ATOM	645	CA	PHE	A	200	184.177	187.478	20.627	1.00	17.58	A C
ATOM	646	CB	PHE	A	200	183.677	187.397	22.091	1.00	12.35	A C
ATOM	647	CG	PHE	A	200	184.369	186.344	22.955	1.00	13.81	A C
ATOM	648	CD1	PHE	A	200	185.449	186.685	23.779	1.00	14.44	A C
ATOM	649	CD2	PHE	A	200	183.898	185.033	22.998	1.00	12.16	A C
ATOM	650	CE1	PHE	A	200	186.043	185.731	24.636	1.00	13.44	A C
ATOM	651	CE2	PHE	A	200	184.474	184.075	23.845	1.00	13.42	A C
ATOM	652	CZ	PHE	A	200	185.552	184.426	24.669	1.00	13.28	A C
ATOM	653	C	PHE	A	200	185.675	187.756	20.549	1.00	18.86	A C
ATOM	654	O	PHE	A	200	186.482	186.840	20.451	1.00	24.13	A O
ATOM	655	N	HIS	A	201	186.056	189.019	20.573	1.00	19.06	A N
ATOM	656	CA	HIS	A	201	187.467	189.335	20.512	1.00	22.05	A C
ATOM	657	CB	HIS	A	201	187.820	189.966	19.159	1.00	20.51	A C
ATOM	658	CG	HIS	A	201	187.161	191.286	18.903	1.00	18.99	A C
ATOM	659	CD2	HIS	A	201	185.922	191.593	18.450	1.00	19.83	A C
ATOM	660	ND1	HIS	A	201	187.848	192.478	18.965	1.00	21.28	A N
ATOM	661	CE1	HIS	A	201	187.071	193.459	18.544	1.00	19.32	A C
ATOM	662	NE2	HIS	A	201	185.896	192.948	18.223	1.00	20.12	A N
ATOM	663	C	HIS	A	201	187.840	190.279	21.629	1.00	22.96	A C
ATOM	664	O	HIS	A	201	186.977	190.871	22.253	1.00	23.67	A O
ATOM	665	N	ASP	A	202	189.126	190.395	21.913	1.00	23.03	A N
ATOM	666	CA	ASP	A	202	189.535	191.331	22.936	1.00	24.25	A C
ATOM	667	CB	ASP	A	202	189.928	190.621	24.235	1.00	25.39	A C
ATOM	668	CG	ASP	A	202	191.175	189.780	24.097	1.00	28.38	A C
ATOM	669	OD1	ASP	A	202	191.836	189.826	23.031	1.00	34.60	A O
ATOM	670	OD2	ASP	A	202	191.495	189.066	25.067	1.00	24.71	A O
ATOM	671	C	ASP	A	202	190.696	192.148	22.398	1.00	25.07	A C
ATOM	672	O	ASP	A	202	190.896	192.235	21.193	1.00	24.05	A O
ATOM	673	N	ALA	A	203	191.480	192.733	23.287	1.00	26.38	A N
ATOM	674	CA	ALA	A	203	192.595	193.564	22.856	1.00	25.39	A C
ATOM	675	CB	ALA	A	203	193.217	194.257	24.082	1.00	23.30	A C
ATOM	676	C	ALA	A	203	193.678	192.847	22.039	1.00	25.31	A C
ATOM	677	O	ALA	A	203	194.184	193.405	21.070	1.00	24.76	A O
ATOM	678	N	THR	A	204	194.038	191.623	22.409	1.00	24.17	A N
ATOM	679	CA	THR	A	204	195.084	190.922	21.682	1.00	24.93	A C
ATOM	680	CB	THR	A	204	196.202	190.467	22.631	1.00	28.17	A C
ATOM	681	OG1	THR	A	204	195.667	189.534	23.582	1.00	29.58	A O
ATOM	682	CG2	THR	A	204	196.805	191.672	23.364	1.00	26.38	A C
ATOM	683	C	THR	A	204	194.638	189.711	20.869	1.00	26.55	A C
ATOM	684	O	THR	A	204	195.360	189.270	19.968	1.00	25.70	A O
ATOM	685	N	ARG	A	205	193.469	189.149	21.166	1.00	26.89	A N
ATOM	686	CA	ARG	A	205	193.039	188.002	20.382	1.00	26.09	A C
ATOM	687	CB	ARG	A	205	193.558	186.710	21.026	1.00	29.89	A C
ATOM	688	CG	ARG	A	205	193.403	186.595	22.508	1.00	35.65	A C
ATOM	689	CD	ARG	A	205	194.768	186.465	23.174	1.00	41.67	A C
ATOM	690	NE	ARG	A	205	194.650	186.517	24.630	1.00	50.08	A N
ATOM	691	CZ	ARG	A	205	195.657	186.756	25.467	1.00	53.61	A C
ATOM	692	NH1	ARG	A	205	196.884	186.972	24.997	1.00	54.63	A N
ATOM	693	NH2	ARG	A	205	195.429	186.782	26.781	1.00	57.41	A N

ATOM	694	C	ARG	A	205	191.561	187.869	20.036	1.00	23.76	A C
ATOM	695	O	ARG	A	205	190.728	188.654	20.478	1.00	26.35	A O
ATOM	696	N	VAL	A	206	191.253	186.892	19.187	1.00	21.67	A N
ATOM	697	CA	VAL	A	206	189.883	186.606	18.776	1.00	17.07	A C
ATOM	698	CB	VAL	A	206	189.704	186.683	17.247	1.00	16.64	A C
ATOM	699	CG1	VAL	A	206	188.235	186.422	16.888	1.00	11.75	A C
ATOM	700	CG2	VAL	A	206	190.136	188.055	16.741	1.00	15.29	A C
ATOM	701	C	VAL	A	206	189.541	185.179	19.225	1.00	16.35	A C
ATOM	702	O	VAL	A	206	190.380	184.277	19.146	1.00	15.34	A O
ATOM	703	N	TYR	A	207	188.308	184.987	19.688	1.00	15.70	A N
ATOM	704	CA	TYR	A	207	187.866	183.692	20.185	1.00	14.78	A C
ATOM	705	CB	TYR	A	207	187.555	183.754	21.686	1.00	14.30	A C
ATOM	706	CG	TYR	A	207	188.599	184.415	22.538	1.00	15.34	A C
ATOM	707	CD1	TYR	A	207	188.725	185.809	22.565	1.00	15.56	A C
ATOM	708	CE1	TYR	A	207	189.669	186.433	23.389	1.00	14.72	A C
ATOM	709	CD2	TYR	A	207	189.445	183.655	23.347	1.00	13.39	A C
ATOM	710	CE2	TYR	A	207	190.393	184.263	24.174	1.00	15.70	A C
ATOM	711	CZ	TYR	A	207	190.497	185.652	24.192	1.00	16.96	A C
ATOM	712	OH	TYR	A	207	191.413	186.252	25.028	1.00	17.44	A O
ATOM	713	C	TYR	A	207	186.624	183.132	19.506	1.00	14.64	A C
ATOM	714	O	TYR	A	207	185.604	183.807	19.390	1.00	14.86	A O
ATOM	715	N	LEU	A	208	186.716	181.882	19.082	1.00	12.98	A N
ATOM	716	CA	LEU	A	208	185.597	181.206	18.475	1.00	11.35	A C
ATOM	717	CB	LEU	A	208	186.025	180.515	17.181	1.00	12.38	A C
ATOM	718	CG	LEU	A	208	186.790	181.296	16.101	1.00	18.53	A C
ATOM	719	CD1	LEU	A	208	186.415	180.695	14.759	1.00	13.01	A C
ATOM	720	CD2	LEU	A	208	186.466	182.794	16.118	1.00	17.18	A C
ATOM	721	C	LEU	A	208	185.092	180.162	19.473	1.00	11.42	A C
ATOM	722	O	LEU	A	208	185.875	179.354	19.978	1.00	9.69	A O
ATOM	723	N	ILE	A	209	183.789	180.194	19.753	1.00	11.10	A N
ATOM	724	CA	ILE	A	209	183.146	179.268	20.670	1.00	10.69	A C
ATOM	725	CB	ILE	A	209	181.968	179.962	21.389	1.00	13.97	A C
ATOM	726	CG2	ILE	A	209	181.316	178.980	22.422	1.00	10.28	A C
ATOM	727	CG1	ILE	A	209	182.489	181.303	21.979	1.00	14.77	A C
ATOM	728	CD1	ILE	A	209	181.466	182.209	22.621	1.00	10.27	A C
ATOM	729	C	ILE	A	209	182.659	178.124	19.785	1.00	13.02	A C
ATOM	730	O	ILE	A	209	181.689	178.238	19.040	1.00	13.94	A O
ATOM	731	N	LEU	A	210	183.373	177.019	19.856	1.00	12.66	A N
ATOM	732	CA	LEU	A	210	183.065	175.867	19.044	1.00	13.21	A C
ATOM	733	CB	LEU	A	210	184.348	175.383	18.375	1.00	13.93	A C
ATOM	734	CG	LEU	A	210	185.046	176.317	17.381	1.00	16.57	A C
ATOM	735	CD1	LEU	A	210	186.507	175.915	17.264	1.00	14.44	A C
ATOM	736	CD2	LEU	A	210	184.351	176.245	16.022	1.00	12.75	A C
ATOM	737	C	LEU	A	210	182.464	174.731	19.841	1.00	10.33	A C
ATOM	738	O	LEU	A	210	182.591	174.664	21.053	1.00	14.25	A O
ATOM	739	N	GLU	A	211	181.784	173.843	19.139	1.00	11.52	A N
ATOM	740	CA	GLU	A	211	181.218	172.646	19.739	1.00	12.06	A C
ATOM	741	CB	GLU	A	211	180.272	171.970	18.751	1.00	15.25	A C
ATOM	742	CG	GLU	A	211	180.147	170.462	18.927	1.00	16.63	A C
ATOM	743	CD	GLU	A	211	179.379	169.783	17.784	1.00	23.31	A C
ATOM	744	OE1	GLU	A	211	179.201	168.531	17.837	1.00	22.59	A O
ATOM	745	OE2	GLU	A	211	178.954	170.500	16.829	1.00	22.15	A O
ATOM	746	C	GLU	A	211	182.424	171.723	20.009	1.00	14.58	A C
ATOM	747	O	GLU	A	211	183.296	171.561	19.156	1.00	11.41	A O
ATOM	748	N	TYR	A	212	182.466	171.133	21.196	1.00	13.40	A N
ATOM	749	CA	TYR	A	212	183.555	170.247	21.589	1.00	15.01	A C
ATOM	750	CB	TYR	A	212	183.541	170.072	23.108	1.00	16.32	A C
ATOM	751	CG	TYR	A	212	184.387	168.938	23.679	1.00	18.16	A C
ATOM	752	CD1	TYR	A	212	185.744	168.820	23.391	1.00	15.83	A C
ATOM	753	CE1	TYR	A	212	186.528	167.845	24.013	1.00	16.35	A C
ATOM	754	CD2	TYR	A	212	183.829	168.042	24.601	1.00	18.49	A C
ATOM	755	CE2	TYR	A	212	184.590	167.074	25.223	1.00	16.40	A C
ATOM	756	CZ	TYR	A	212	185.934	166.973	24.934	1.00	19.22	A C
ATOM	757	OH	TYR	A	212	186.655	165.995	25.594	1.00	15.81	A O
ATOM	758	C	TYR	A	212	183.463	168.889	20.909	1.00	15.14	A C
ATOM	759	O	TYR	A	212	182.414	168.259	20.920	1.00	14.66	A O
ATOM	760	N	ALA	A	213	184.561	168.451	20.297	1.00	15.74	A N
ATOM	761	CA	ALA	A	213	184.623	167.142	19.636	1.00	14.66	A C
ATOM	762	CB	ALA	A	213	185.341	167.270	18.302	1.00	16.59	A C
ATOM	763	C	ALA	A	213	185.417	166.270	20.615	1.00	16.61	A C

ATOM	764	O	ALA A 213	186.638	166.352	20.682	1.00	16.21	A	O
ATOM	765	N	PRO A 214	184.724	165.418	21.380	1.00	15.97	A	N
ATOM	766	CD	PRO A 214	183.323	165.077	21.082	1.00	15.58	A	C
ATOM	767	CA	PRO A 214	185.258	164.515	22.398	1.00	15.31	A	C
ATOM	768	CB	PRO A 214	184.000	163.837	22.963	1.00	14.60	A	C
ATOM	769	CG	PRO A 214	182.844	164.624	22.417	1.00	17.26	A	C
ATOM	770	C	PRO A 214	186.319	163.472	22.000	1.00	17.90	A	C
ATOM	771	O	PRO A 214	187.172	163.152	22.829	1.00	18.00	A	O
ATOM	772	N	LEU A 215	186.274	162.922	20.777	1.00	14.95	A	N
ATOM	773	CA	LEU A 215	187.214	161.880	20.362	1.00	14.66	A	C
ATOM	774	CB	LEU A 215	186.453	160.710	19.692	1.00	16.00	A	C
ATOM	775	CG	LEU A 215	185.316	160.072	20.536	1.00	22.00	A	C
ATOM	776	CD1	LEU A 215	184.664	158.818	19.898	1.00	17.85	A	C
ATOM	777	CD2	LEU A 215	185.906	159.717	21.877	1.00	20.55	A	C
ATOM	778	C	LEU A 215	188.415	162.306	19.505	1.00	14.59	A	C
ATOM	779	O	LEU A 215	189.093	161.477	18.905	1.00	14.29	A	O
ATOM	780	N	GLY A 216	188.691	163.603	19.455	1.00	16.74	A	N
ATOM	781	CA	GLY A 216	189.836	164.070	18.694	1.00	14.83	A	C
ATOM	782	C	GLY A 216	189.701	164.060	17.184	1.00	13.54	A	C
ATOM	783	O	GLY A 216	188.597	164.008	16.656	1.00	12.48	A	O
ATOM	784	N	THR A 217	190.843	164.091	16.497	1.00	12.97	A	N
ATOM	785	CA	THR A 217	190.867	164.136	15.044	1.00	14.08	A	C
ATOM	786	CB	THR A 217	192.005	164.998	14.503	1.00	14.49	A	C
ATOM	787	OG1	THR A 217	193.242	164.310	14.733	1.00	16.68	A	O
ATOM	788	CG2	THR A 217	192.043	166.347	15.167	1.00	10.84	A	C
ATOM	789	C	THR A 217	191.060	162.811	14.347	1.00	16.46	A	C
ATOM	790	O	THR A 217	191.741	161.910	14.849	1.00	15.02	A	O
ATOM	791	N	VAL A 218	190.481	162.721	13.153	1.00	16.27	A	N
ATOM	792	CA	VAL A 218	190.616	161.533	12.340	1.00	15.99	A	C
ATOM	793	CB	VAL A 218	189.802	161.683	11.038	1.00	16.57	A	C
ATOM	794	CG1	VAL A 218	190.263	160.649	9.999	1.00	18.56	A	C
ATOM	795	CG2	VAL A 218	188.339	161.504	11.349	1.00	11.27	A	C
ATOM	796	C	VAL A 218	192.117	161.366	12.051	1.00	16.41	A	C
ATOM	797	O	VAL A 218	192.611	160.255	11.896	1.00	15.84	A	O
ATOM	798	N	TYR A 219	192.826	162.487	12.008	1.00	15.85	A	N
ATOM	799	CA	TYR A 219	194.261	162.509	11.789	1.00	16.76	A	C
ATOM	800	CB	TYR A 219	194.771	163.937	11.908	1.00	18.52	A	C
ATOM	801	CG	TYR A 219	196.259	164.024	11.800	1.00	19.33	A	C
ATOM	802	CD1	TYR A 219	196.870	163.870	10.570	1.00	17.55	A	C
ATOM	803	CE1	TYR A 219	198.249	163.929	10.450	1.00	23.59	A	C
ATOM	804	CD2	TYR A 219	197.065	164.236	12.936	1.00	21.27	A	C
ATOM	805	CE2	TYR A 219	198.454	164.289	12.834	1.00	20.92	A	C
ATOM	806	CZ	TYR A 219	199.032	164.136	11.584	1.00	24.53	A	C
ATOM	807	OH	TYR A 219	200.392	164.188	11.448	1.00	28.22	A	O
ATOM	808	C	TYR A 219	194.999	161.661	12.826	1.00	18.49	A	C
ATOM	809	O	TYR A 219	195.910	160.888	12.494	1.00	18.32	A	O
ATOM	810	N	ARG A 220	194.617	161.836	14.086	1.00	16.66	A	N
ATOM	811	CA	ARG A 220	195.247	161.100	15.154	1.00	19.76	A	C
ATOM	812	CB	ARG A 220	194.848	161.674	16.514	1.00	22.26	A	C
ATOM	813	CG	ARG A 220	195.514	160.949	17.669	1.00	27.26	A	C
ATOM	814	CD	ARG A 220	197.039	161.124	17.660	1.00	29.11	A	C
ATOM	815	NE	ARG A 220	197.689	160.200	18.595	1.00	32.84	A	N
ATOM	816	CZ	ARG A 220	199.003	160.005	18.702	1.00	35.53	A	C
ATOM	817	NH1	ARG A 220	199.867	160.669	17.931	1.00	39.53	A	N
ATOM	818	NH2	ARG A 220	199.449	159.129	19.594	1.00	36.11	A	N
ATOM	819	C	ARG A 220	194.908	159.608	15.088	1.00	19.85	A	C
ATOM	820	O	ARG A 220	195.768	158.748	15.322	1.00	19.84	A	O
ATOM	821	N	GLU A 221	193.661	159.309	14.746	1.00	19.44	A	N
ATOM	822	CA	GLU A 221	193.192	157.935	14.628	1.00	21.14	A	C
ATOM	823	CB	GLU A 221	191.670	157.930	14.386	1.00	22.94	A	C
ATOM	824	CG	GLU A 221	190.968	156.594	14.519	1.00	27.24	A	C
ATOM	825	CD	GLU A 221	191.078	155.998	15.918	1.00	30.92	A	C
ATOM	826	OE1	GLU A 221	190.736	154.798	16.073	1.00	35.57	A	O
ATOM	827	OE2	GLU A 221	191.502	156.716	16.857	1.00	31.40	A	O
ATOM	828	C	GLU A 221	193.930	157.268	13.465	1.00	22.03	A	C
ATOM	829	O	GLU A 221	194.201	156.061	13.493	1.00	21.79	A	O
ATOM	830	N	LEU A 222	194.257	158.060	12.442	1.00	20.91	A	N
ATOM	831	CA	LEU A 222	194.969	157.533	11.287	1.00	18.01	A	C
ATOM	832	CB	LEU A 222	194.838	158.485	10.079	1.00	17.83	A	C
ATOM	833	CG	LEU A 222	195.181	157.923	8.676	1.00	21.87	A	C

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ATOM    834  CD1 LEU A 222     194.366 156.652   8.358  1.00 17.44      A    C
ATOM    835  CD2 LEU A 222     194.892 159.007   7.634  1.00 19.79      A    C
ATOM    836  C   LEU A 222     196.439 157.261  11.639  1.00 16.91      A    C
ATOM    837  O   LEU A 222     197.012 156.317  11.119  1.00 16.89      A    O
ATOM    838  N   GLN A 223     197.062 158.066  12.503  1.00 16.66      A    N
ATOM    839  CA  GLN A 223     198.446 157.769  12.900  1.00 17.24      A    C
ATOM    840  CB  GLN A 223     199.022 158.808  13.850  1.00 19.18      A    C
ATOM    841  CG  GLN A 223     199.250 160.205  13.317  1.00 28.34      A    C
ATOM    842  CD  GLN A 223     199.954 161.058  14.355  1.00 31.88      A    C
ATOM    843  OE1 GLN A 223     199.437 161.241  15.474  1.00 31.86      A    O
ATOM    844  NE2 GLN A 223     201.149 161.584  14.005  1.00 34.43      A    N
ATOM    845  C   GLN A 223     198.456 156.448  13.688  1.00 21.01      A    C
ATOM    846  O   GLN A 223     199.360 155.630  13.523  1.00 18.77      A    O
ATOM    847  N   LYS A 224     197.464 156.277  14.570  1.00 21.30      A    N
ATOM    848  CA  LYS A 224     197.357 155.099  15.419  1.00 21.07      A    C
ATOM    849  CB  LYS A 224     196.258 155.300  16.492  1.00 24.80      A    C
ATOM    850  CG  LYS A 224     196.479 156.522  17.399  1.00 26.43      A    C
ATOM    851  CD  LYS A 224     195.427 156.642  18.505  1.00 30.49      A    C
ATOM    852  CE  LYS A 224     195.834 157.727  19.507  1.00 31.44      A    C
ATOM    853  NZ  LYS A 224     194.917 157.868  20.668  1.00 33.32      A    N
ATOM    854  C   LYS A 224     197.088 153.812  14.647  1.00 20.29      A    C
ATOM    855  O   LYS A 224     197.799 152.829  14.821  1.00 19.90      A    O
ATOM    856  N   LEU A 225     196.059 153.800  13.806  1.00 20.45      A    N
ATOM    857  CA  LEU A 225     195.753 152.603  13.039  1.00 18.46      A    C
ATOM    858  CB  LEU A 225     194.272 152.588  12.615  1.00 20.03      A    C
ATOM    859  CG  LEU A 225     193.224 152.691  13.740  1.00 24.89      A    C
ATOM    860  CD1 LEU A 225     191.784 152.656  13.213  1.00 20.57      A    C
ATOM    861  CD2 LEU A 225     193.462 151.543  14.674  1.00 26.58      A    C
ATOM    862  C   LEU A 225     196.631 152.464  11.780  1.00 19.83      A    C
ATOM    863  O   LEU A 225     196.694 151.381  11.186  1.00 20.09      A    O
ATOM    864  N   SER A 226     197.296 153.545  11.375  1.00 18.33      A    N
ATOM    865  CA  SER A 226     198.137 153.578  10.158  1.00 21.51      A    C
ATOM    866  CB  SER A 226     199.160 152.426  10.124  1.00 21.48      A    C
ATOM    867  OG  SER A 226     200.116 152.533  11.177  1.00 27.63      A    O
ATOM    868  C   SER A 226     197.295 153.542   8.871  1.00 20.48      A    C
ATOM    869  O   SER A 226     197.566 154.284   7.927  1.00 19.41      A    O
ATOM    870  N   LYS A 227     196.290 152.664   8.838  1.00 20.02      A    N
ATOM    871  CA  LYS A 227     195.358 152.524   7.697  1.00 19.86      A    C
ATOM    872  CB  LYS A 227     195.668 151.280   6.876  1.00 24.72      A    C
ATOM    873  CG  LYS A 227     196.854 151.364   5.990  1.00 29.64      A    C
ATOM    874  CD  LYS A 227     197.148 149.990   5.419  1.00 35.21      A    C
ATOM    875  CE  LYS A 227     198.330 150.088   4.465  1.00 41.32      A    C
ATOM    876  NZ  LYS A 227     198.843 148.758   4.016  1.00 43.82      A    N
ATOM    877  C   LYS A 227     193.970 152.303   8.274  1.00 16.62      A    C
ATOM    878  O   LYS A 227     193.852 151.881   9.411  1.00 18.80      A    O
ATOM    879  N   PHE A 228     192.930 152.584   7.499  1.00 14.54      A    N
ATOM    880  CA  PHE A 228     191.548 152.342   7.932  1.00 15.70      A    C
ATOM    881  CB  PHE A 228     190.665 153.590   7.729  1.00 12.09      A    C
ATOM    882  CG  PHE A 228     190.958 154.697   8.679  1.00 13.97      A    C
ATOM    883  CD1 PHE A 228     190.564 156.005   8.400  1.00 14.03      A    C
ATOM    884  CD2 PHE A 228     191.629 154.439   9.860  1.00 13.49      A    C
ATOM    885  CE1 PHE A 228     190.844 157.046   9.299  1.00 12.37      A    C
ATOM    886  CE2 PHE A 228     191.912 155.466  10.767  1.00 14.79      A    C
ATOM    887  CZ  PHE A 228     191.520 156.772  10.487  1.00 11.50      A    C
ATOM    888  C   PHE A 228     191.051 151.227   7.016  1.00 15.70      A    C
ATOM    889  O   PHE A 228     191.399 151.212   5.833  1.00 16.89      A    O
ATOM    890  N   ASP A 229     190.261 150.290   7.536  1.00 16.61      A    N
ATOM    891  CA  ASP A 229     189.753 149.221   6.666  1.00 18.23      A    C
ATOM    892  CB  ASP A 229     189.261 148.005   7.478  1.00 17.42      A    C
ATOM    893  CG  ASP A 229     188.092 148.325   8.369  1.00 20.41      A    C
ATOM    894  OD1 ASP A 229     187.161 149.024   7.930  1.00 28.20      A    O
ATOM    895  OD2 ASP A 229     188.072 147.859   9.511  1.00 26.24      A    O
ATOM    896  C   ASP A 229     188.624 149.817   5.810  1.00 16.57      A    C
ATOM    897  O   ASP A 229     188.322 151.006   5.939  1.00 17.37      A    O
ATOM    898  N   GLU A 230     187.998 149.020   4.952  1.00 15.33      A    N
ATOM    899  CA  GLU A 230     186.947 149.560   4.084  1.00 17.43      A    C
ATOM    900  CB  GLU A 230     186.571 148.541   3.002  1.00 16.24      A    C
ATOM    901  CG  GLU A 230     187.743 148.066   2.153  1.00 23.01      A    C
ATOM    902  CD  GLU A 230     187.313 147.497   0.794  1.00 27.22      A    C
ATOM    903  OE1 GLU A 230     186.584 146.478   0.753  1.00 28.49      A    O
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ATOM	904	OE2	GLU	A	230	187.711	148.085	-0.244	1.00	29.45	A	O
ATOM	905	C	GLU	A	230	185.680	150.062	4.783	1.00	16.70	A	C
ATOM	906	O	GLU	A	230	185.141	151.099	4.419	1.00	13.33	A	O
ATOM	907	N	GLN	A	231	185.209	149.326	5.782	1.00	16.53	A	N
ATOM	908	CA	GLN	A	231	184.003	149.711	6.512	1.00	17.02	A	C
ATOM	909	CB	GLN	A	231	183.728	148.656	7.596	1.00	15.32	A	C
ATOM	910	CG	GLN	A	231	182.370	148.737	8.289	1.00	17.56	A	C
ATOM	911	CD	GLN	A	231	182.297	149.841	9.359	1.00	22.59	A	C
ATOM	912	OE1	GLN	A	231	183.298	150.112	10.075	1.00	21.11	A	O
ATOM	913	NE2	GLN	A	231	181.106	150.478	9.494	1.00	19.70	A	N
ATOM	914	C	GLN	A	231	184.195	151.124	7.120	1.00	17.00	A	C
ATOM	915	O	GLN	A	231	183.381	152.024	6.890	1.00	18.40	A	O
ATOM	916	N	ARG	A	232	185.281	151.308	7.873	1.00	17.36	A	N
ATOM	917	CA	ARG	A	232	185.607	152.593	8.509	1.00	17.63	A	C
ATOM	918	CB	ARG	A	232	186.905	152.465	9.307	1.00	19.87	A	C
ATOM	919	CG	ARG	A	232	187.205	153.647	10.172	1.00	20.99	A	C
ATOM	920	CD	ARG	A	232	186.795	153.359	11.597	1.00	28.38	A	C
ATOM	921	NE	ARG	A	232	187.588	154.189	12.487	1.00	32.23	A	N
ATOM	922	CZ	ARG	A	232	188.247	153.745	13.545	1.00	31.41	A	C
ATOM	923	NH1	ARG	A	232	188.213	152.459	13.873	1.00	29.13	A	N
ATOM	924	NH2	ARG	A	232	188.963	154.604	14.257	1.00	35.98	A	N
ATOM	925	C	ARG	A	232	185.770	153.747	7.507	1.00	14.94	A	C
ATOM	926	O	ARG	A	232	185.356	154.866	7.761	1.00	12.98	A	O
ATOM	927	N	THR	A	233	186.403	153.457	6.384	1.00	13.16	A	N
ATOM	928	CA	THR	A	233	186.652	154.446	5.361	1.00	13.60	A	C
ATOM	929	CB	THR	A	233	187.719	153.902	4.340	1.00	14.55	A	C
ATOM	930	OG1	THR	A	233	188.937	153.623	5.048	1.00	14.87	A	O
ATOM	931	CG2	THR	A	233	188.016	154.908	3.231	1.00	13.20	A	C
ATOM	932	C	THR	A	233	185.339	154.863	4.686	1.00	13.47	A	C
ATOM	933	O	THR	A	233	185.090	156.056	4.508	1.00	12.81	A	O
ATOM	934	N	ALA	A	234	184.481	153.901	4.353	1.00	11.54	A	N
ATOM	935	CA	ALA	A	234	183.199	154.225	3.713	1.00	12.90	A	C
ATOM	936	CB	ALA	A	234	182.531	152.967	3.184	1.00	6.31	A	C
ATOM	937	C	ALA	A	234	182.254	154.953	4.675	1.00	15.13	A	C
ATOM	938	O	ALA	A	234	181.498	155.843	4.272	1.00	18.25	A	O
ATOM	939	N	THR	A	235	182.297	154.579	5.945	1.00	13.08	A	N
ATOM	940	CA	THR	A	235	181.450	155.221	6.909	1.00	11.34	A	C
ATOM	941	CB	THR	A	235	181.581	154.543	8.289	1.00	13.04	A	C
ATOM	942	OG1	THR	A	235	181.181	153.167	8.177	1.00	13.03	A	O
ATOM	943	CG2	THR	A	235	180.679	155.235	9.304	1.00	9.30	A	C
ATOM	944	C	THR	A	235	181.813	156.701	6.976	1.00	12.76	A	C
ATOM	945	O	THR	A	235	180.930	157.553	6.894	1.00	14.21	A	O
ATOM	946	N	TYR	A	236	183.104	157.003	7.115	1.00	12.83	A	N
ATOM	947	CA	TYR	A	236	183.586	158.392	7.157	1.00	14.72	A	C
ATOM	948	CB	TYR	A	236	185.096	158.451	7.371	1.00	16.17	A	C
ATOM	949	CG	TYR	A	236	185.572	158.175	8.772	1.00	16.12	A	C
ATOM	950	CD1	TYR	A	236	184.785	158.491	9.876	1.00	16.03	A	C
ATOM	951	CE1	TYR	A	236	185.237	158.261	11.162	1.00	16.90	A	C
ATOM	952	CD2	TYR	A	236	186.830	157.626	8.993	1.00	13.79	A	C
ATOM	953	CE2	TYR	A	236	187.290	157.397	10.266	1.00	15.98	A	C
ATOM	954	CZ	TYR	A	236	186.490	157.709	11.347	1.00	19.04	A	C
ATOM	955	OH	TYR	A	236	186.935	157.420	12.609	1.00	22.33	A	O
ATOM	956	C	TYR	A	236	183.291	159.154	5.862	1.00	16.50	A	C
ATOM	957	O	TYR	A	236	182.873	160.311	5.898	1.00	15.39	A	O
ATOM	958	N	ILE	A	237	183.536	158.517	4.718	1.00	14.99	A	N
ATOM	959	CA	ILE	A	237	183.274	159.176	3.456	1.00	15.34	A	C
ATOM	960	CB	ILE	A	237	183.656	158.295	2.242	1.00	15.72	A	C
ATOM	961	CG2	ILE	A	237	183.331	159.027	0.960	1.00	17.81	A	C
ATOM	962	CG1	ILE	A	237	185.157	157.993	2.241	1.00	13.11	A	C
ATOM	963	CD1	ILE	A	237	186.062	159.254	2.278	1.00	13.67	A	C
ATOM	964	C	ILE	A	237	181.795	159.542	3.379	1.00	17.56	A	C
ATOM	965	O	ILE	A	237	181.442	160.638	2.953	1.00	18.55	A	O
ATOM	966	N	THR	A	238	180.935	158.626	3.804	1.00	17.36	A	N
ATOM	967	CA	THR	A	238	179.489	158.853	3.816	1.00	14.99	A	C
ATOM	968	CB	THR	A	238	178.760	157.600	4.330	1.00	13.08	A	C
ATOM	969	OG1	THR	A	238	179.059	156.502	3.464	1.00	16.26	A	O
ATOM	970	CG2	THR	A	238	177.257	157.817	4.354	1.00	13.58	A	C
ATOM	971	C	THR	A	238	179.069	160.037	4.696	1.00	14.23	A	C
ATOM	972	O	THR	A	238	178.214	160.829	4.307	1.00	14.27	A	O
ATOM	973	N	GLU	A	239	179.649	160.149	5.888	1.00	11.63	A	N

ATOM	974	CA	GLU	A	239	179.285	161.242	6.781	1.00	13.23	A C
ATOM	975	CB	GLU	A	239	179.913	161.025	8.170	1.00	14.00	A C
ATOM	976	CG	GLU	A	239	179.443	159.721	8.804	1.00	18.38	A C
ATOM	977	CD	GLU	A	239	180.121	159.365	10.124	1.00	24.00	A C
ATOM	978	OE1	GLU	A	239	181.366	159.259	10.187	1.00	24.67	A O
ATOM	979	OE2	GLU	A	239	179.385	159.158	11.114	1.00	32.52	A O
ATOM	980	C	GLU	A	239	179.767	162.548	6.149	1.00	13.27	A C
ATOM	981	O	GLU	A	239	179.028	163.525	6.073	1.00	12.45	A O
ATOM	982	N	LEU	A	240	181.005	162.538	5.668	1.00	11.05	A N
ATOM	983	CA	LEU	A	240	181.566	163.707	5.049	1.00	13.29	A C
ATOM	984	CB	LEU	A	240	183.043	163.465	4.738	1.00	15.79	A C
ATOM	985	CG	LEU	A	240	183.894	164.638	4.235	1.00	16.19	A C
ATOM	986	CD1	LEU	A	240	184.031	165.720	5.279	1.00	19.17	A C
ATOM	987	CD2	LEU	A	240	185.267	164.108	3.884	1.00	19.04	A C
ATOM	988	C	LEU	A	240	180.798	164.081	3.773	1.00	13.39	A C
ATOM	989	O	LEU	A	240	180.513	165.256	3.548	1.00	14.19	A O
ATOM	990	N	ALA	A	241	180.443	163.091	2.955	1.00	11.67	A N
ATOM	991	CA	ALA	A	241	179.726	163.372	1.711	1.00	12.50	A C
ATOM	992	CB	ALA	A	241	179.577	162.108	0.873	1.00	9.22	A C
ATOM	993	C	ALA	A	241	178.367	164.004	1.979	1.00	14.45	A C
ATOM	994	O	ALA	A	241	177.923	164.878	1.222	1.00	14.36	A O
ATOM	995	N	ASN	A	242	177.714	163.562	3.053	1.00	14.82	A N
ATOM	996	CA	ASN	A	242	176.420	164.109	3.447	1.00	16.37	A C
ATOM	997	CB	ASN	A	242	175.822	163.329	4.619	1.00	20.05	A C
ATOM	998	CG	ASN	A	242	175.213	162.005	4.210	1.00	22.16	A C
ATOM	999	OD1	ASN	A	242	175.027	161.133	5.055	1.00	23.63	A O
ATOM	1000	ND2	ASN	A	242	174.883	161.850	2.922	1.00	24.84	A N
ATOM	1001	C	ASN	A	242	176.623	165.540	3.918	1.00	16.87	A C
ATOM	1002	O	ASN	A	242	175.804	166.429	3.636	1.00	13.50	A O
ATOM	1003	N	ALA	A	243	177.713	165.747	4.656	1.00	13.07	A N
ATOM	1004	CA	ALA	A	243	178.019	167.065	5.190	1.00	13.28	A C
ATOM	1005	CB	ALA	A	243	179.204	166.982	6.137	1.00	13.95	A C
ATOM	1006	C	ALA	A	243	178.292	168.063	4.072	1.00	14.76	A C
ATOM	1007	O	ALA	A	243	177.751	169.173	4.080	1.00	11.54	A O
ATOM	1008	N	LEU	A	244	179.126	167.651	3.113	1.00	15.34	A N
ATOM	1009	CA	LEU	A	244	179.487	168.477	1.955	1.00	14.00	A C
ATOM	1010	CB	LEU	A	244	180.572	167.766	1.134	1.00	12.82	A C
ATOM	1011	CG	LEU	A	244	181.958	167.607	1.791	1.00	13.66	A C
ATOM	1012	CD1	LEU	A	244	182.862	166.784	0.883	1.00	10.60	A C
ATOM	1013	CD2	LEU	A	244	182.570	168.990	2.068	1.00	10.59	A C
ATOM	1014	C	LEU	A	244	178.245	168.764	1.078	1.00	13.84	A C
ATOM	1015	O	LEU	A	244	178.079	169.862	0.545	1.00	9.94	A O
ATOM	1016	N	SER	A	245	177.363	167.776	0.949	1.00	11.65	A N
ATOM	1017	CA	SER	A	245	176.162	167.951	0.149	1.00	12.45	A C
ATOM	1018	CB	SER	A	245	175.403	166.623	0.101	1.00	11.63	A C
ATOM	1019	OG	SER	A	245	174.265	166.724	-0.729	1.00	18.58	A O
ATOM	1020	C	SER	A	245	175.284	169.090	0.716	1.00	12.58	A C
ATOM	1021	O	SER	A	245	174.753	169.925	-0.028	1.00	13.38	A O
ATOM	1022	N	TYR	A	246	175.156	169.126	2.038	1.00	10.82	A N
ATOM	1023	CA	TYR	A	246	174.388	170.146	2.719	1.00	12.87	A C
ATOM	1024	CB	TYR	A	246	174.337	169.838	4.232	1.00	10.92	A C
ATOM	1025	CG	TYR	A	246	173.941	171.010	5.076	1.00	13.12	A C
ATOM	1026	CD1	TYR	A	246	172.615	171.398	5.169	1.00	11.79	A C
ATOM	1027	CE1	TYR	A	246	172.249	172.526	5.886	1.00	15.75	A C
ATOM	1028	CD2	TYR	A	246	174.905	171.782	5.727	1.00	14.34	A C
ATOM	1029	CE2	TYR	A	246	174.548	172.925	6.452	1.00	17.65	A C
ATOM	1030	CZ	TYR	A	246	173.209	173.288	6.526	1.00	18.09	A C
ATOM	1031	OH	TYR	A	246	172.806	174.411	7.231	1.00	20.69	A O
ATOM	1032	C	TYR	A	246	175.068	171.506	2.474	1.00	14.69	A C
ATOM	1033	O	TYR	A	246	174.399	172.522	2.263	1.00	16.54	A O
ATOM	1034	N	CYS	A	247	176.398	171.506	2.526	1.00	12.79	A N
ATOM	1035	CA	CYS	A	247	177.217	172.695	2.312	1.00	15.14	A C
ATOM	1036	CB	CYS	A	247	178.697	172.339	2.453	1.00	18.30	A C
ATOM	1037	SG	CYS	A	247	179.389	172.397	4.097	1.00	20.02	A S
ATOM	1038	C	CYS	A	247	177.033	173.298	0.930	1.00	14.64	A C
ATOM	1039	O	CYS	A	247	176.944	174.517	0.765	1.00	13.32	A O
ATOM	1040	N	HIS	A	248	177.018	172.424	-0.063	1.00	12.96	A N
ATOM	1041	CA	HIS	A	248	176.867	172.853	-1.435	1.00	14.92	A C
ATOM	1042	CB	HIS	A	248	177.246	171.711	-2.361	1.00	14.58	A C
ATOM	1043	CG	HIS	A	248	178.698	171.388	-2.305	1.00	15.75	A C

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ATOM   1044  CD2 HIS A 248     179.651 171.777  -1.427  1.00 14.69      A    C
ATOM   1045  ND1 HIS A 248     179.331 170.596  -3.236  1.00 18.18      A    N
ATOM   1046  CE1 HIS A 248     180.614 170.512  -2.934  1.00 15.22      A    C
ATOM   1047  NE2 HIS A 248     180.832 171.220  -1.840  1.00 14.77      A    N
ATOM   1048  C   HIS A 248     175.474 173.338  -1.717  1.00 16.00      A    C
ATOM   1049  O   HIS A 248     175.285 174.228  -2.538  1.00 16.44      A    O
ATOM   1050  N   SER A 249     174.503 172.744  -1.028  1.00 14.49      A    N
ATOM   1051  CA  SER A 249     173.125 173.148  -1.197  1.00 15.32      A    C
ATOM   1052  CB  SER A 249     172.201 172.233  -0.392  1.00 11.40      A    C
ATOM   1053  OG  SER A 249     172.281 172.527   0.985  1.00 16.48      A    O
ATOM   1054  C   SER A 249     173.055 174.597  -0.696  1.00 16.09      A    C
ATOM   1055  O   SER A 249     172.139 175.350  -1.034  1.00 18.04      A    O
ATOM   1056  N   LYS A 250     174.031 174.988   0.118  1.00 15.99      A    N
ATOM   1057  CA  LYS A 250     174.072 176.363   0.599  1.00 15.13      A    C
ATOM   1058  CB  LYS A 250     174.405 176.441   2.107  1.00 13.57      A    C
ATOM   1059  CG  LYS A 250     173.350 175.850   3.040  1.00 15.19      A    C
ATOM   1060  CD  LYS A 250     171.930 176.203   2.629  1.00 19.05      A    C
ATOM   1061  CE  LYS A 250     170.943 175.150   3.131  1.00 24.43      A    C
ATOM   1062  NZ  LYS A 250     169.492 175.372   2.776  1.00 28.76      A    N
ATOM   1063  C   LYS A 250     175.106 177.133  -0.210  1.00 11.97      A    C
ATOM   1064  O   LYS A 250     175.375 178.286   0.057  1.00 14.99      A    O
ATOM   1065  N   ARG A 251     175.686 176.478  -1.208  1.00 14.14      A    N
ATOM   1066  CA  ARG A 251     176.690 177.099  -2.079  1.00 13.45      A    C
ATOM   1067  CB  ARG A 251     176.080 178.305  -2.792  1.00 14.05      A    C
ATOM   1068  CG  ARG A 251     174.976 177.936  -3.779  1.00 21.06      A    C
ATOM   1069  CD  ARG A 251     175.441 178.112  -5.227  1.00 27.95      A    C
ATOM   1070  NE  ARG A 251     175.547 176.844  -5.943  1.00 31.22      A    N
ATOM   1071  CZ  ARG A 251     176.391 176.615  -6.949  1.00 31.35      A    C
ATOM   1072  NH1 ARG A 251     177.214 177.570  -7.368  1.00 28.63      A    N
ATOM   1073  NH2 ARG A 251     176.427 175.422  -7.526  1.00 31.96      A    N
ATOM   1074  C   ARG A 251     177.974 177.493  -1.362  1.00 12.30      A    C
ATOM   1075  O   ARG A 251     178.618 178.472  -1.703  1.00 12.69      A    O
ATOM   1076  N   VAL A 252     178.344 176.714  -0.363  1.00 11.12      A    N
ATOM   1077  CA  VAL A 252     179.569 176.971   0.368  1.00 12.45      A    C
ATOM   1078  CB  VAL A 252     179.338 176.810   1.885  1.00 12.23      A    C
ATOM   1079  CG1 VAL A 252     180.651 176.509   2.587  1.00  9.08      A    C
ATOM   1080  CG2 VAL A 252     178.681 178.059   2.446  1.00 10.54      A    C
ATOM   1081  C   VAL A 252     180.604 175.940  -0.083  1.00 15.27      A    C
ATOM   1082  O   VAL A 252     180.267 174.774  -0.265  1.00 12.78      A    O
ATOM   1083  N   ILE A 253     181.840 176.373  -0.326  1.00 13.72      A    N
ATOM   1084  CA  ILE A 253     182.872 175.419  -0.680  1.00 10.89      A    C
ATOM   1085  CB  ILE A 253     183.670 175.788  -1.957  1.00 11.67      A    C
ATOM   1086  CG2 ILE A 253     184.426 174.535  -2.441  1.00  5.83      A    C
ATOM   1087  CG1 ILE A 253     182.733 176.323  -3.059  1.00 10.28      A    C
ATOM   1088  CD1 ILE A 253     183.439 176.812  -4.329  1.00  3.57      A    C
ATOM   1089  C   ILE A 253     183.831 175.453   0.498  1.00 13.01      A    C
ATOM   1090  O   ILE A 253     184.347 176.524   0.849  1.00 13.11      A    O
ATOM   1091  N   HIS A 254     184.050 174.288   1.113  1.00 13.19      A    N
ATOM   1092  CA  HIS A 254     184.943 174.161   2.259  1.00 12.95      A    C
ATOM   1093  CB  HIS A 254     184.868 172.745   2.843  1.00 12.70      A    C
ATOM   1094  CG  HIS A 254     185.587 172.606   4.160  1.00 12.92      A    C
ATOM   1095  CD2 HIS A 254     185.206 172.914   5.423  1.00  9.91      A    C
ATOM   1096  ND1 HIS A 254     186.898 172.180   4.257  1.00 13.73      A    N
ATOM   1097  CE1 HIS A 254     187.290 172.229   5.515  1.00 10.14      A    C
ATOM   1098  NE2 HIS A 254     186.282 172.671   6.243  1.00 11.29      A    N
ATOM   1099  C   HIS A 254     186.383 174.507   1.889  1.00 13.04      A    C
ATOM   1100  O   HIS A 254     186.971 175.438   2.447  1.00 14.41      A    O
ATOM   1101  N   ARG A 255     186.935 173.743   0.953  1.00 12.07      A    N
ATOM   1102  CA  ARG A 255     188.291 173.910   0.438  1.00 12.35      A    C
ATOM   1103  CB  ARG A 255     188.494 175.341  -0.050  1.00 13.05      A    C
ATOM   1104  CG  ARG A 255     187.553 175.664  -1.200  1.00 15.96      A    C
ATOM   1105  CD  ARG A 255     187.942 176.885  -1.997  1.00 11.42      A    C
ATOM   1106  NE  ARG A 255     188.045 178.075  -1.183  1.00 13.42      A    N
ATOM   1107  CZ  ARG A 255     188.194 179.295  -1.690  1.00 17.97      A    C
ATOM   1108  NH1 ARG A 255     188.248 179.453  -3.012  1.00 12.59      A    N
ATOM   1109  NH2 ARG A 255     188.308 180.348  -0.880  1.00 11.08      A    N
ATOM   1110  C   ARG A 255     189.479 173.491   1.328  1.00 14.82      A    C
ATOM   1111  O   ARG A 255     190.628 173.656   0.914  1.00 16.45      A    O
ATOM   1112  N   ASP A 256     189.237 172.959   2.528  1.00 13.90      A    N
ATOM   1113  CA  ASP A 256     190.355 172.522   3.364  1.00 14.13      A    C
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ATOM   1114  CB  ASP A 256     190.779 173.631   4.341  1.00 15.61      A    C
ATOM   1115  CG  ASP A 256     192.185 173.408   4.930  1.00 17.71      A    C
ATOM   1116  OD1 ASP A 256     193.119 172.950   4.217  1.00 18.23      A    O
ATOM   1117  OD2 ASP A 256     192.364 173.712   6.130  1.00 20.01      A    O
ATOM   1118  C   ASP A 256     190.021 171.231   4.094  1.00 14.83      A    C
ATOM   1119  O   ASP A 256     190.209 171.088   5.300  1.00 17.90      A    O
ATOM   1120  N   ILE A 257     189.522 170.285   3.321  1.00 14.83      A    N
ATOM   1121  CA  ILE A 257     189.170 168.978   3.809  1.00 15.89      A    C
ATOM   1122  CB  ILE A 257     188.209 168.318   2.821  1.00 16.68      A    C
ATOM   1123  CG2 ILE A 257     188.096 166.834   3.106  1.00 18.21      A    C
ATOM   1124  CG1 ILE A 257     186.851 169.010   2.909  1.00 19.11      A    C
ATOM   1125  CD1 ILE A 257     185.939 168.636   1.771  1.00 26.98      A    C
ATOM   1126  C   ILE A 257     190.461 168.170   3.888  1.00 16.84      A    C
ATOM   1127  O   ILE A 257     191.180 168.019   2.890  1.00 19.23      A    O
ATOM   1128  N   LYS A 258     190.759 167.673   5.079  1.00 14.42      A    N
ATOM   1129  CA  LYS A 258     191.948 166.861   5.321  1.00 13.61      A    C
ATOM   1130  CB  LYS A 258     193.218 167.696   5.165  1.00 11.12      A    C
ATOM   1131  CG  LYS A 258     193.288 168.912   6.021  1.00 10.35      A    C
ATOM   1132  CD  LYS A 258     194.685 169.397   5.941  1.00 11.98      A    C
ATOM   1133  CE  LYS A 258     194.946 170.539   6.844  1.00 10.31      A    C
ATOM   1134  NZ  LYS A 258     196.316 171.028   6.523  1.00 13.12      A    N
ATOM   1135  C   LYS A 258     191.828 166.275   6.728  1.00 12.82      A    C
ATOM   1136  O   LYS A 258     191.093 166.807   7.565  1.00 12.94      A    O
ATOM   1137  N   PRO A 259     192.547 165.180   7.011  1.00 13.48      A    N
ATOM   1138  CD  PRO A 259     193.607 164.582   6.181  1.00 11.93      A    C
ATOM   1139  CA  PRO A 259     192.487 164.525   8.329  1.00 14.07      A    C
ATOM   1140  CB  PRO A 259     193.641 163.517   8.267  1.00 14.89      A    C
ATOM   1141  CG  PRO A 259     193.714 163.197   6.778  1.00 14.98      A    C
ATOM   1142  C   PRO A 259     192.527 165.413   9.583  1.00 15.36      A    C
ATOM   1143  O   PRO A 259     191.773 165.171  10.520  1.00 15.88      A    O
ATOM   1144  N   GLU A 260     193.388 166.428   9.593  1.00 15.22      A    N
ATOM   1145  CA  GLU A 260     193.516 167.340  10.734  1.00 19.96      A    C
ATOM   1146  CB  GLU A 260     194.770 168.225  10.563  1.00 22.41      A    C
ATOM   1147  CG  GLU A 260     196.090 167.457  10.516  1.00 29.11      A    C
ATOM   1148  CD  GLU A 260     196.610 167.140   9.092  1.00 32.88      A    C
ATOM   1149  OE1 GLU A 260     195.826 166.656   8.235  1.00 33.12      A    O
ATOM   1150  OE2 GLU A 260     197.823 167.360   8.841  1.00 35.49      A    O
ATOM   1151  C   GLU A 260     192.280 168.252  10.924  1.00 18.80      A    C
ATOM   1152  O   GLU A 260     192.140 168.905  11.957  1.00 18.71      A    O
ATOM   1153  N   ASN A 261     191.401 168.309   9.922  1.00 16.14      A    N
ATOM   1154  CA  ASN A 261     190.206 169.139  10.014  1.00 14.12      A    C
ATOM   1155  CB  ASN A 261     190.084 170.036   8.799  1.00 12.74      A    C
ATOM   1156  CG  ASN A 261     191.068 171.176   8.824  1.00 12.37      A    C
ATOM   1157  OD1 ASN A 261     191.719 171.446   9.840  1.00 11.65      A    O
ATOM   1158  ND2 ASN A 261     191.178 171.868   7.705  1.00 11.18      A    N
ATOM   1159  C   ASN A 261     188.944 168.329  10.159  1.00 14.87      A    C
ATOM   1160  O   ASN A 261     187.844 168.855  10.027  1.00 14.12      A    O
ATOM   1161  N   LEU A 262     189.117 167.037  10.428  1.00 16.20      A    N
ATOM   1162  CA  LEU A 262     187.996 166.127  10.596  1.00 13.58      A    C
ATOM   1163  CB  LEU A 262     188.128 164.954   9.627  1.00 13.22      A    C
ATOM   1164  CG  LEU A 262     188.164 165.406   8.162  1.00 15.01      A    C
ATOM   1165  CD1 LEU A 262     188.502 164.230   7.232  1.00  8.10      A    C
ATOM   1166  CD2 LEU A 262     186.807 166.049   7.834  1.00 10.56      A    C
ATOM   1167  C   LEU A 262     188.027 165.633  12.031  1.00 15.43      A    C
ATOM   1168  O   LEU A 262     188.999 165.008  12.459  1.00 17.59      A    O
ATOM   1169  N   LEU A 263     186.968 165.915  12.777  1.00 11.89      A    N
ATOM   1170  CA  LEU A 263     186.926 165.505  14.154  1.00 10.46      A    C
ATOM   1171  CB  LEU A 263     186.657 166.725  15.005  1.00 13.46      A    C
ATOM   1172  CG  LEU A 263     187.584 167.921  14.699  1.00 14.28      A    C
ATOM   1173  CD1 LEU A 263     187.208 169.055  15.634  1.00 15.02      A    C
ATOM   1174  CD2 LEU A 263     189.050 167.563  14.865  1.00 12.28      A    C
ATOM   1175  C   LEU A 263     185.905 164.407  14.409  1.00 12.75      A    C
ATOM   1176  O   LEU A 263     185.068 164.112  13.553  1.00 13.83      A    O
ATOM   1177  N   LEU A 264     185.989 163.780  15.576  1.00 13.44      A    N
ATOM   1178  CA  LEU A 264     185.076 162.693  15.919  1.00 15.08      A    C
ATOM   1179  CB  LEU A 264     185.856 161.421  16.298  1.00 15.27      A    C
ATOM   1180  CG  LEU A 264     186.808 160.821  15.263  1.00 16.94      A    C
ATOM   1181  CD1 LEU A 264     187.393 159.499  15.783  1.00 20.04      A    C
ATOM   1182  CD2 LEU A 264     186.043 160.590  13.944  1.00 16.69      A    C
ATOM   1183  C   LEU A 264     184.190 163.103  17.078  1.00 14.83      A    C
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ATOM   1184  O   LEU A 264     184.669 163.613  18.096  1.00 13.07      A    O
ATOM   1185  N   GLY A 265     182.890 162.881  16.907  1.00 14.85      A    N
ATOM   1186  CA  GLY A 265     181.943 163.218  17.947  1.00 15.69      A    C
ATOM   1187  C   GLY A 265     181.844 162.127  18.999  1.00 17.48      A    C
ATOM   1188  O   GLY A 265     182.597 161.144  18.989  1.00 19.40      A    O
ATOM   1189  N   SER A 266     180.888 162.306  19.899  1.00 17.64      A    N
ATOM   1190  CA  SER A 266     180.641 161.398  21.007  1.00 18.83      A    C
ATOM   1191  CB  SER A 266     179.417 161.895  21.766  1.00 17.49      A    C
ATOM   1192  OG  SER A 266     179.347 161.294  23.037  1.00 31.06      A    O
ATOM   1193  C   SER A 266     180.457 159.923  20.615  1.00 16.59      A    C
ATOM   1194  O   SER A 266     180.771 159.025  21.389  1.00 16.64      A    O
ATOM   1195  N   ALA A 267     179.960 159.675  19.412  1.00 15.97      A    N
ATOM   1196  CA  ALA A 267     179.731 158.314  18.939  1.00 17.67      A    C
ATOM   1197  CB  ALA A 267     178.288 158.163  18.456  1.00 14.65      A    C
ATOM   1198  C   ALA A 267     180.670 157.930  17.815  1.00 18.92      A    C
ATOM   1199  O   ALA A 267     180.353 157.040  17.025  1.00 21.00      A    O
ATOM   1200  N   GLY A 268     181.812 158.604  17.716  1.00 21.24      A    N
ATOM   1201  CA  GLY A 268     182.741 158.278  16.648  1.00 22.38      A    C
ATOM   1202  C   GLY A 268     182.289 158.773  15.282  1.00 21.15      A    C
ATOM   1203  O   GLY A 268     182.809 158.323  14.266  1.00 20.78      A    O
ATOM   1204  N   GLU A 269     181.324 159.690  15.249  1.00 19.71      A    N
ATOM   1205  CA  GLU A 269     180.831 160.239  13.983  1.00 18.83      A    C
ATOM   1206  CB  GLU A 269     179.386 160.746  14.107  1.00 20.11      A    C
ATOM   1207  CG  GLU A 269     179.239 162.020  14.944  1.00 27.28      A    C
ATOM   1208  CD  GLU A 269     178.874 161.722  16.385  1.00 29.04      A    C
ATOM   1209  OE1 GLU A 269     179.762 161.324  17.177  1.00 30.97      A    O
ATOM   1210  OE2 GLU A 269     177.677 161.868  16.711  1.00 33.63      A    O
ATOM   1211  C   GLU A 269     181.702 161.409  13.549  1.00 17.27      A    C
ATOM   1212  O   GLU A 269     182.088 162.249  14.368  1.00 15.38      A    O
ATOM   1213  N   LEU A 270     181.994 161.461  12.253  1.00 14.97      A    N
ATOM   1214  CA  LEU A 270     182.822 162.515  11.689  1.00 15.39      A    C
ATOM   1215  CB  LEU A 270     183.169 162.167  10.229  1.00 21.78      A    C
ATOM   1216  CG  LEU A 270     184.100 163.071   9.408  1.00 22.18      A    C
ATOM   1217  CD1 LEU A 270     185.484 162.839   9.938  1.00 26.73      A    C
ATOM   1218  CD2 LEU A 270     184.109 162.725   7.944  1.00 27.39      A    C
ATOM   1219  C   LEU A 270     182.129 163.876  11.722  1.00 13.13      A    C
ATOM   1220  O   LEU A 270     180.932 163.973  11.490  1.00 12.45      A    O
ATOM   1221  N   LYS A 271     182.895 164.918  12.027  1.00 13.69      A    N
ATOM   1222  CA  LYS A 271     182.395 166.296  12.025  1.00 13.80      A    C
ATOM   1223  CB  LYS A 271     182.201 166.814  13.450  1.00 13.22      A    C
ATOM   1224  CG  LYS A 271     180.846 166.378  14.025  1.00 16.86      A    C
ATOM   1225  CD  LYS A 271     180.790 166.428  15.509  1.00 17.04      A    C
ATOM   1226  CE  LYS A 271     179.494 165.823  15.967  1.00 15.79      A    C
ATOM   1227  NZ  LYS A 271     178.379 166.692  15.545  1.00 20.81      A    N
ATOM   1228  C   LYS A 271     183.392 167.151  11.270  1.00 15.22      A    C
ATOM   1229  O   LYS A 271     184.586 167.152  11.582  1.00 16.95      A    O
ATOM   1230  N   ILE A 272     182.919 167.842  10.238  1.00 15.55      A    N
ATOM   1231  CA  ILE A 272     183.803 168.702   9.462  1.00 15.61      A    C
ATOM   1232  CB  ILE A 272     183.143 169.220   8.163  1.00 19.61      A    C
ATOM   1233  CG2 ILE A 272     184.054 170.269   7.530  1.00 18.20      A    C
ATOM   1234  CG1 ILE A 272     182.850 168.069   7.203  1.00 22.81      A    C
ATOM   1235  CD1 ILE A 272     182.068 168.504   5.967  1.00 25.62      A    C
ATOM   1236  C   ILE A 272     184.051 169.926  10.303  1.00 13.27      A    C
ATOM   1237  O   ILE A 272     183.136 170.422  10.945  1.00 12.04      A    O
ATOM   1238  N   ALA A 273     185.270 170.428  10.294  1.00 11.17      A    N
ATOM   1239  CA  ALA A 273     185.568 171.623  11.069  1.00 13.73      A    C
ATOM   1240  CB  ALA A 273     186.266 171.248  12.376  1.00 10.14      A    C
ATOM   1241  C   ALA A 273     186.472 172.498  10.225  1.00 16.38      A    C
ATOM   1242  O   ALA A 273     186.688 172.208   9.047  1.00 16.96      A    O
ATOM   1243  N   ASP A 274     186.986 173.568  10.834  1.00 17.04      A    N
ATOM   1244  CA  ASP A 274     187.913 174.500  10.200  1.00 15.18      A    C
ATOM   1245  CB  ASP A 274     189.288 173.805  10.074  1.00 17.02      A    C
ATOM   1246  CG  ASP A 274     190.447 174.786   9.800  1.00 19.27      A    C
ATOM   1247  OD1 ASP A 274     190.190 175.999   9.635  1.00 22.45      A    O
ATOM   1248  OD2 ASP A 274     191.624 174.338   9.753  1.00 17.87      A    O
ATOM   1249  C   ASP A 274     187.434 175.064   8.838  1.00 16.14      A    C
ATOM   1250  O   ASP A 274     187.846 174.604   7.776  1.00 12.68      A    O
ATOM   1251  N   PHE A 275     186.559 176.065   8.881  1.00 15.86      A    N
ATOM   1252  CA  PHE A 275     186.074 176.688   7.666  1.00 14.12      A    C
ATOM   1253  CB  PHE A 275     184.602 177.108   7.835  1.00 13.16      A    C
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ATOM   1254  CG  PHE A 275     183.640 175.948   7.721  1.00 12.72      A    C
ATOM   1255  CD1 PHE A 275     183.540 174.994   8.746  1.00 11.42      A    C
ATOM   1256  CD2 PHE A 275     182.936 175.727   6.535  1.00 11.44      A    C
ATOM   1257  CE1 PHE A 275     182.768 173.843   8.581  1.00 10.04      A    C
ATOM   1258  CE2 PHE A 275     182.157 174.568   6.367  1.00 12.57      A    C
ATOM   1259  CZ  PHE A 275     182.079 173.631   7.396  1.00 11.15      A    C
ATOM   1260  C   PHE A 275     186.966 177.868   7.289  1.00 15.87      A    C
ATOM   1261  O   PHE A 275     186.541 178.780   6.568  1.00 15.07      A    O
ATOM   1262  N   GLY A 276     188.221 177.820   7.751  1.00 15.09      A    N
ATOM   1263  CA  GLY A 276     189.184 178.875   7.452  1.00 17.20      A    C
ATOM   1264  C   GLY A 276     189.322 179.285   5.983  1.00 16.44      A    C
ATOM   1265  O   GLY A 276     189.368 180.482   5.665  1.00 17.13      A    O
ATOM   1266  N   TRP A 277     189.378 178.307   5.082  1.00 13.73      A    N
ATOM   1267  CA  TRP A 277     189.514 178.596   3.664  1.00 14.40      A    C
ATOM   1268  CB  TRP A 277     190.568 177.667   3.071  1.00 20.13      A    C
ATOM   1269  CG  TRP A 277     191.860 177.753   3.789  1.00 22.40      A    C
ATOM   1270  CD2 TRP A 277     192.691 178.904   3.893  1.00 23.73      A    C
ATOM   1271  CE2 TRP A 277     193.788 178.558   4.701  1.00 26.05      A    C
ATOM   1272  CE3 TRP A 277     192.617 180.198   3.375  1.00 25.94      A    C
ATOM   1273  CD1 TRP A 277     192.463 176.777   4.517  1.00 23.25      A    C
ATOM   1274  NE1 TRP A 277     193.625 177.250   5.074  1.00 24.53      A    N
ATOM   1275  CZ2 TRP A 277     194.806 179.467   5.015  1.00 27.86      A    C
ATOM   1276  CZ3 TRP A 277     193.631 181.106   3.686  1.00 28.74      A    C
ATOM   1277  CH2 TRP A 277     194.711 180.733   4.496  1.00 26.68      A    C
ATOM   1278  C   TRP A 277     188.202 178.467   2.888  1.00 13.46      A    C
ATOM   1279  O   TRP A 277     188.190 178.362   1.664  1.00 14.44      A    O
ATOM   1280  N   SER A 278     187.097 178.481   3.605  1.00 14.67      A    N
ATOM   1281  CA  SER A 278     185.809 178.360   2.973  1.00 16.81      A    C
ATOM   1282  CB  SER A 278     184.785 177.937   4.009  1.00 18.65      A    C
ATOM   1283  OG  SER A 278     185.042 176.588   4.334  1.00 31.56      A    O
ATOM   1284  C   SER A 278     185.338 179.620   2.269  1.00 15.59      A    C
ATOM   1285  O   SER A 278     185.887 180.700   2.456  1.00 13.40      A    O
ATOM   1286  N   VAL A 279     184.330 179.468   1.427  1.00 12.47      A    N
ATOM   1287  CA  VAL A 279     183.790 180.622   0.750  1.00 15.04      A    C
ATOM   1288  CB  VAL A 279     184.631 181.010  -0.524  1.00 14.76      A    C
ATOM   1289  CG1 VAL A 279     184.436 179.985  -1.646  1.00 10.49      A    C
ATOM   1290  CG2 VAL A 279     184.256 182.419  -0.971  1.00  9.51      A    C
ATOM   1291  C   VAL A 279     182.347 180.399   0.352  1.00 15.66      A    C
ATOM   1292  O   VAL A 279     181.902 179.259   0.162  1.00 16.74      A    O
ATOM   1293  N   HIS A 280     181.604 181.491   0.276  1.00 14.84      A    N
ATOM   1294  CA  HIS A 280     180.224 181.389  -0.133  1.00 17.48      A    C
ATOM   1295  CB  HIS A 280     179.332 182.330   0.694  1.00 14.36      A    C
ATOM   1296  CG  HIS A 280     177.885 182.230   0.336  1.00 16.95      A    C
ATOM   1297  CD2 HIS A 280     177.154 181.176  -0.102  1.00 16.10      A    C
ATOM   1298  ND1 HIS A 280     177.045 183.323   0.300  1.00 15.76      A    N
ATOM   1299  CE1 HIS A 280     175.864 182.946  -0.154  1.00 17.22      A    C
ATOM   1300  NE2 HIS A 280     175.903 181.648  -0.407  1.00 18.56      A    N
ATOM   1301  C   HIS A 280     180.236 181.772  -1.622  1.00 17.74      A    C
ATOM   1302  O   HIS A 280     180.439 182.942  -1.989  1.00 16.22      A    O
ATOM   1303  N   ALA A 281     180.048 180.773  -2.480  1.00 15.79      A    N
ATOM   1304  CA  ALA A 281     180.066 180.984  -3.930  1.00 17.35      A    C
ATOM   1305  CB  ALA A 281     181.103 180.047  -4.565  1.00 15.43      A    C
ATOM   1306  C   ALA A 281     178.693 180.779  -4.610  1.00 18.31      A    C
ATOM   1307  O   ALA A 281     178.489 179.809  -5.311  1.00 18.09      A    O
ATOM   1308  N   PRO A 282     177.754 181.726  -4.412  1.00 20.27      A    N
ATOM   1309  CD  PRO A 282     177.983 182.946  -3.597  1.00 20.44      A    C
ATOM   1310  CA  PRO A 282     176.381 181.701  -4.974  1.00 21.92      A    C
ATOM   1311  CB  PRO A 282     175.770 183.032  -4.483  1.00 21.47      A    C
ATOM   1312  CG  PRO A 282     176.575 183.413  -3.327  1.00 21.85      A    C
ATOM   1313  C   PRO A 282     176.326 181.581  -6.480  1.00 22.24      A    C
ATOM   1314  O   PRO A 282     175.611 180.729  -6.987  1.00 24.89      A    O
ATOM   1315  N   SER A 283     177.088 182.439  -7.163  1.00 24.90      A    N
ATOM   1316  CA  SER A 283     177.131 182.464  -8.629  1.00 28.30      A    C
ATOM   1317  CB  SER A 283     176.711 183.837  -9.202  1.00 26.31      A    C
ATOM   1318  OG  SER A 283     175.659 184.461  -8.492  1.00 30.72      A    O
ATOM   1319  C   SER A 283     178.454 182.133  -9.327  1.00 27.14      A    C
ATOM   1320  O   SER A 283     178.563 181.133 -10.033  1.00 31.35      A    O
ATOM   1321  N   SER A 284     179.434 183.011  -9.147  1.00 25.92      A    N
ATOM   1322  CA  SER A 284     180.749 182.937  -9.789  1.00 26.41      A    C
ATOM   1323  CB  SER A 284     181.476 184.252  -9.583  1.00 26.11      A    C
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ATOM	1324	OG	SER	A	284	180.590	185.288	-9.231	1.00	32.06	A	O
ATOM	1325	C	SER	A	284	181.720	181.869	-9.346	1.00	24.70	A	C
ATOM	1326	O	SER	A	284	181.617	181.347	-8.254	1.00	26.06	A	O
ATOM	1327	N	ARG	A	285	182.717	181.636	-10.192	1.00	23.60	A	N
ATOM	1328	CA	ARG	A	285	183.782	180.701	-9.910	1.00	25.00	A	C
ATOM	1329	CB	ARG	A	285	184.337	180.169	-11.225	1.00	25.95	A	C
ATOM	1330	CG	ARG	A	285	183.367	179.201	-11.935	1.00	31.00	A	C
ATOM	1331	CD	ARG	A	285	184.154	178.152	-12.746	1.00	38.12	A	C
ATOM	1332	NE	ARG	A	285	184.419	178.543	-14.135	1.00	42.96	A	N
ATOM	1333	CZ	ARG	A	285	185.202	177.856	-14.971	1.00	45.91	A	C
ATOM	1334	NH1	ARG	A	285	185.808	176.744	-14.560	1.00	46.53	A	N
ATOM	1335	NH2	ARG	A	285	185.364	178.267	-16.225	1.00	46.52	A	N
ATOM	1336	C	ARG	A	285	184.869	181.436	-9.074	1.00	23.19	A	C
ATOM	1337	O	ARG	A	285	184.791	182.652	-8.873	1.00	23.63	A	O
ATOM	1338	N	ARG	A	286	185.871	180.720	-8.578	1.00	22.25	A	N
ATOM	1339	CA	ARG	A	286	186.898	181.369	-7.770	1.00	18.11	A	C
ATOM	1340	CB	ARG	A	286	186.781	180.826	-6.344	1.00	16.41	A	C
ATOM	1341	CG	ARG	A	286	185.467	181.252	-5.671	1.00	17.03	A	C
ATOM	1342	CD	ARG	A	286	185.642	182.655	-5.179	1.00	16.99	A	C
ATOM	1343	NE	ARG	A	286	184.443	183.221	-4.632	1.00	25.38	A	N
ATOM	1344	CZ	ARG	A	286	184.398	184.417	-4.072	1.00	26.94	A	C
ATOM	1345	NH1	ARG	A	286	185.509	185.138	-3.995	1.00	28.48	A	N
ATOM	1346	NH2	ARG	A	286	183.244	184.894	-3.605	1.00	30.62	A	N
ATOM	1347	C	ARG	A	286	188.309	181.189	-8.339	1.00	19.47	A	C
ATOM	1348	O	ARG	A	286	188.537	180.305	-9.174	1.00	17.62	A	O
ATOM	1349	N	TPO	A	287	189.226	182.041	-7.916	1.00	21.77	A	N
ATOM	1350	CA	TPO	A	287	190.558	181.974	-8.377	1.00	21.28	A	C
ATOM	1351	CB	TPO	A	287	190.775	183.306	-9.113	1.00	25.22	A	C
ATOM	1352	CG2	TPO	A	287	189.942	183.372	-10.421	1.00	22.17	A	C
ATOM	1353	OG1	TPO	A	287	190.484	184.557	-8.448	1.00	33.29	A	O
ATOM	1354	P	TPO	A	287	191.582	185.763	-8.444	1.00	33.70	A	P
ATOM	1355	O1P	TPO	A	287	190.902	186.991	-9.195	1.00	41.17	A	O
ATOM	1356	O2P	TPO	A	287	192.847	185.199	-9.239	1.00	37.62	A	O
ATOM	1357	O3P	TPO	A	287	191.990	186.067	-6.912	1.00	41.70	A	O
ATOM	1358	C	TPO	A	287	191.612	181.717	-7.265	1.00	16.99	A	C
ATOM	1359	O	TPO	A	287	192.886	181.536	-7.600	1.00	25.86	A	O
ATOM	1360	N	TPO	A	288	191.139	181.614	-6.033	1.00	16.91	A	N
ATOM	1361	CA	TPO	A	288	192.066	181.441	-4.938	1.00	16.31	A	C
ATOM	1362	CB	TPO	A	288	191.262	181.750	-3.672	1.00	18.77	A	C
ATOM	1363	CG2	TPO	A	288	192.190	181.949	-2.512	1.00	16.50	A	C
ATOM	1364	OG1	TPO	A	288	190.694	183.015	-3.936	1.00	23.64	A	O
ATOM	1365	P	TPO	A	288	189.163	183.188	-3.329	1.00	18.56	A	P
ATOM	1366	O1P	TPO	A	288	189.234	182.723	-1.818	1.00	19.25	A	O
ATOM	1367	O2P	TPO	A	288	188.217	182.242	-4.154	1.00	24.67	A	O
ATOM	1368	O3P	TPO	A	288	188.820	184.760	-3.320	1.00	24.29	A	O
ATOM	1369	C	TPO	A	288	192.828	180.109	-4.873	1.00	17.62	A	C
ATOM	1370	O	TPO	A	288	192.132	178.986	-5.036	1.00	16.48	A	O
ATOM	1371	N	LEU	A	289	194.152	180.122	-4.825	1.00	19.62	A	N
ATOM	1372	CA	LEU	A	289	194.793	178.875	-4.419	1.00	20.29	A	C
ATOM	1373	CB	LEU	A	289	196.229	178.759	-4.993	1.00	21.71	A	C
ATOM	1374	CG	LEU	A	289	196.977	177.458	-4.598	1.00	25.59	A	C
ATOM	1375	CD1	LEU	A	289	196.506	176.298	-5.488	1.00	30.17	A	C
ATOM	1376	CD2	LEU	A	289	198.475	177.596	-4.769	1.00	26.69	A	C
ATOM	1377	C	LEU	A	289	194.833	178.800	-2.900	1.00	17.60	A	C
ATOM	1378	O	LEU	A	289	195.428	179.646	-2.272	1.00	20.61	A	O
ATOM	1379	N	CYS	A	290	194.191	177.810	-2.307	1.00	16.97	A	N
ATOM	1380	CA	CYS	A	290	194.204	177.679	-0.844	1.00	18.91	A	C
ATOM	1381	CB	CYS	A	290	193.102	178.535	-0.201	1.00	16.86	A	C
ATOM	1382	SG	CYS	A	290	191.434	178.234	-0.820	1.00	22.10	A	S
ATOM	1383	C	CYS	A	290	194.003	176.211	-0.453	1.00	17.81	A	C
ATOM	1384	O	CYS	A	290	193.554	175.403	-1.266	1.00	15.28	A	O
ATOM	1385	N	GLY	A	291	194.340	175.862	0.786	1.00	19.11	A	N
ATOM	1386	CA	GLY	A	291	194.203	174.484	1.227	1.00	18.98	A	C
ATOM	1387	C	GLY	A	291	195.536	173.896	1.644	1.00	19.71	A	C
ATOM	1388	O	GLY	A	291	196.458	174.606	2.047	1.00	21.01	A	O
ATOM	1389	N	THR	A	292	195.626	172.584	1.523	1.00	18.60	A	N
ATOM	1390	CA	THR	A	292	196.800	171.837	1.903	1.00	16.87	A	C
ATOM	1391	CB	THR	A	292	196.378	170.657	2.760	1.00	19.75	A	C
ATOM	1392	OG1	THR	A	292	195.457	171.126	3.752	1.00	25.57	A	O
ATOM	1393	CG2	THR	A	292	197.563	169.991	3.407	1.00	18.64	A	C

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ATOM   1394  C   THR A 292     197.453 171.308   0.652  1.00 17.38      A     C
ATOM   1395  O   THR A 292     196.772 170.864  -0.269  1.00 16.20      A     O
ATOM   1396  N   LEU A 293     198.780 171.347   0.631  1.00 18.38      A     N
ATOM   1397  CA  LEU A 293     199.545 170.868  -0.511  1.00 18.67      A     C
ATOM   1398  CB  LEU A 293     201.011 170.747  -0.102  1.00 18.33      A     C
ATOM   1399  CG  LEU A 293     201.947 170.217  -1.188  1.00 19.70      A     C
ATOM   1400  CD1 LEU A 293     201.997 171.229  -2.316  1.00 20.14      A     C
ATOM   1401  CD2 LEU A 293     203.332 169.962  -0.603  1.00 18.52      A     C
ATOM   1402  C   LEU A 293     199.063 169.533  -1.126  1.00 19.06      A     C
ATOM   1403  O   LEU A 293     198.654 169.496  -2.287  1.00 16.78      A     O
ATOM   1404  N   ASP A 294     199.106 168.447  -0.355  1.00 16.52      A     N
ATOM   1405  CA  ASP A 294     198.701 167.143  -0.868  1.00 15.08      A     C
ATOM   1406  CB  ASP A 294     199.029 166.048   0.164  1.00 19.73      A     C
ATOM   1407  CG  ASP A 294     200.527 165.669   0.175  1.00 23.92      A     C
ATOM   1408  OD1 ASP A 294     201.065 165.254  -0.891  1.00 23.94      A     O
ATOM   1409  OD2 ASP A 294     201.161 165.783   1.245  1.00 24.71      A     O
ATOM   1410  C   ASP A 294     197.239 167.026  -1.309  1.00 14.50      A     C
ATOM   1411  O   ASP A 294     196.875 166.084  -2.011  1.00 11.76      A     O
ATOM   1412  N   TYR A 295     196.411 167.996  -0.923  1.00 13.78      A     N
ATOM   1413  CA  TYR A 295     194.993 167.963  -1.267  1.00 12.35      A     C
ATOM   1414  CB  TYR A 295     194.156 168.157  -0.001  1.00 12.74      A     C
ATOM   1415  CG  TYR A 295     194.061 166.933   0.868  1.00 16.79      A     C
ATOM   1416  CD1 TYR A 295     195.179 166.449   1.561  1.00 19.00      A     C
ATOM   1417  CE1 TYR A 295     195.119 165.265   2.307  1.00 18.70      A     C
ATOM   1418  CD2 TYR A 295     192.871 166.216   0.947  1.00 16.93      A     C
ATOM   1419  CE2 TYR A 295     192.792 165.035   1.682  1.00 21.69      A     C
ATOM   1420  CZ  TYR A 295     193.916 164.559   2.357  1.00 22.19      A     C
ATOM   1421  OH  TYR A 295     193.805 163.362   3.046  1.00 26.24      A     O
ATOM   1422  C   TYR A 295     194.542 168.963  -2.336  1.00 10.66      A     C
ATOM   1423  O   TYR A 295     193.387 168.955  -2.741  1.00 11.85      A     O
ATOM   1424  N   LEU A 296     195.460 169.797  -2.805  1.00 10.92      A     N
ATOM   1425  CA  LEU A 296     195.119 170.800  -3.807  1.00 13.78      A     C
ATOM   1426  CB  LEU A 296     196.328 171.679  -4.144  1.00 11.44      A     C
ATOM   1427  CG  LEU A 296     196.931 172.488  -2.995  1.00 15.78      A     C
ATOM   1428  CD1 LEU A 296     198.287 173.081  -3.411  1.00 13.74      A     C
ATOM   1429  CD2 LEU A 296     195.954 173.585  -2.582  1.00 15.05      A     C
ATOM   1430  C   LEU A 296     194.591 170.206  -5.108  1.00 14.17      A     C
ATOM   1431  O   LEU A 296     195.144 169.255  -5.648  1.00 12.20      A     O
ATOM   1432  N   PRO A 297     193.504 170.783  -5.631  1.00 13.56      A     N
ATOM   1433  CD  PRO A 297     192.676 171.841  -5.015  1.00 13.83      A     C
ATOM   1434  CA  PRO A 297     192.921 170.302  -6.893  1.00 12.38      A     C
ATOM   1435  CB  PRO A 297     191.516 170.923  -6.872  1.00 14.10      A     C
ATOM   1436  CG  PRO A 297     191.744 172.233  -6.155  1.00 13.16      A     C
ATOM   1437  C   PRO A 297     193.772 170.826  -8.083  1.00 14.86      A     C
ATOM   1438  O   PRO A 297     194.361 171.906  -7.993  1.00 14.20      A     O
ATOM   1439  N   PRO A 298     193.830 170.080  -9.213  1.00 14.90      A     N
ATOM   1440  CD  PRO A 298     193.074 168.838  -9.478  1.00 13.08      A     C
ATOM   1441  CA  PRO A 298     194.606 170.479 -10.403  1.00 12.06      A     C
ATOM   1442  CB  PRO A 298     194.228 169.428 -11.450  1.00 12.23      A     C
ATOM   1443  CG  PRO A 298     193.813 168.254 -10.653  1.00 11.96      A     C
ATOM   1444  C   PRO A 298     194.250 171.874 -10.894  1.00 12.75      A     C
ATOM   1445  O   PRO A 298     195.124 172.677 -11.218  1.00 12.47      A     O
ATOM   1446  N   GLU A 299     192.954 172.154 -10.954  1.00 12.43      A     N
ATOM   1447  CA  GLU A 299     192.495 173.447 -11.427  1.00 15.93      A     C
ATOM   1448  CB  GLU A 299     190.956 173.520 -11.439  1.00 15.99      A     C
ATOM   1449  CG  GLU A 299     190.283 173.211 -10.098  1.00 20.28      A     C
ATOM   1450  CD  GLU A 299     189.893 171.729  -9.951  1.00 22.71      A     C
ATOM   1451  OE1 GLU A 299     190.741 170.854 -10.262  1.00 22.72      A     O
ATOM   1452  OE2 GLU A 299     188.743 171.450  -9.525  1.00 19.63      A     O
ATOM   1453  C   GLU A 299     193.068 174.609 -10.615  1.00 17.99      A     C
ATOM   1454  O   GLU A 299     193.217 175.706 -11.147  1.00 21.24      A     O
ATOM   1455  N   MET A 300     193.385 174.401  -9.340  1.00 17.80      A     N
ATOM   1456  CA  MET A 300     193.949 175.497  -8.541  1.00 21.17      A     C
ATOM   1457  CB  MET A 300     193.781 175.248  -7.031  1.00 21.87      A     C
ATOM   1458  CG  MET A 300     192.562 175.935  -6.417  1.00 24.58      A     C
ATOM   1459  SD  MET A 300     192.223 175.516  -4.665  1.00 23.96      A     S
ATOM   1460  CE  MET A 300     193.835 175.427  -4.097  1.00 25.92      A     C
ATOM   1461  C   MET A 300     195.429 175.697  -8.845  1.00 22.52      A     C
ATOM   1462  O   MET A 300     195.900 176.818  -9.034  1.00 17.97      A     O
ATOM   1463  N   ILE A 301     196.153 174.592  -8.905  1.00 25.70      A     N
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ATOM   1464  CA  ILE A 301     197.573 174.627  -9.160  1.00 28.05      A    C
ATOM   1465  CB  ILE A 301     198.162 173.192  -9.173  1.00 31.23      A    C
ATOM   1466  CG2 ILE A 301     199.640 173.228  -9.502  1.00 33.00      A    C
ATOM   1467  CG1 ILE A 301     197.977 172.525  -7.813  1.00 34.03      A    C
ATOM   1468  CD1 ILE A 301     198.227 171.019  -7.871  1.00 39.59      A    C
ATOM   1469  C   ILE A 301     197.857 175.289 -10.501  1.00 28.39      A    C
ATOM   1470  O   ILE A 301     198.736 176.140 -10.608  1.00 28.70      A    O
ATOM   1471  N   GLU A 302     197.091 174.902 -11.513  1.00 29.15      A    N
ATOM   1472  CA  GLU A 302     197.260 175.411 -12.864  1.00 27.63      A    C
ATOM   1473  CB  GLU A 302     196.614 174.449 -13.847  1.00 28.51      A    C
ATOM   1474  CG  GLU A 302     197.309 173.128 -13.932  1.00 31.90      A    C
ATOM   1475  CD  GLU A 302     196.442 172.074 -14.604  1.00 34.88      A    C
ATOM   1476  OE1 GLU A 302     195.546 172.441 -15.420  1.00 35.44      A    O
ATOM   1477  OE2 GLU A 302     196.663 170.878 -14.322  1.00 33.88      A    O
ATOM   1478  C   GLU A 302     196.759 176.817 -13.160  1.00 26.56      A    C
ATOM   1479  O   GLU A 302     196.730 177.216 -14.323  1.00 25.45      A    O
ATOM   1480  N   GLY A 303     196.351 177.553 -12.130  1.00 26.68      A    N
ATOM   1481  CA  GLY A 303     195.891 178.915 -12.333  1.00 24.63      A    C
ATOM   1482  C   GLY A 303     194.576 179.072 -13.077  1.00 26.17      A    C
ATOM   1483  O   GLY A 303     194.333 180.080 -13.739  1.00 25.60      A    O
ATOM   1484  N   ARG A 304     193.718 178.068 -12.976  1.00 27.24      A    N
ATOM   1485  CA  ARG A 304     192.409 178.095 -13.617  1.00 26.83      A    C
ATOM   1486  CB  ARG A 304     192.068 176.721 -14.229  1.00 26.35      A    C
ATOM   1487  CG  ARG A 304     192.726 176.410 -15.584  1.00 35.40      A    C
ATOM   1488  CD  ARG A 304     191.737 176.691 -16.749  1.00 43.36      A    C
ATOM   1489  NE  ARG A 304     192.316 176.665 -18.095  1.00 47.14      A    N
ATOM   1490  CZ  ARG A 304     191.602 176.827 -19.210  1.00 51.59      A    C
ATOM   1491  NH1 ARG A 304     190.290 177.025 -19.121  1.00 54.10      A    N
ATOM   1492  NH2 ARG A 304     192.189 176.794 -20.413  1.00 53.71      A    N
ATOM   1493  C   ARG A 304     191.386 178.429 -12.536  1.00 27.81      A    C
ATOM   1494  O   ARG A 304     191.684 178.391 -11.326  1.00 29.71      A    O
ATOM   1495  N   MET A 305     190.178 178.746 -12.969  1.00 25.68      A    N
ATOM   1496  CA  MET A 305     189.112 179.048 -12.038  1.00 26.17      A    C
ATOM   1497  CB  MET A 305     188.027 179.807 -12.757  1.00 30.29      A    C
ATOM   1498  CG  MET A 305     188.517 181.155 -13.154  1.00 35.60      A    C
ATOM   1499  SD  MET A 305     187.192 182.156 -13.740  1.00 46.48      A    S
ATOM   1500  CE  MET A 305     187.949 182.896 -15.291  1.00 45.95      A    C
ATOM   1501  C   MET A 305     188.544 177.772 -11.466  1.00 23.39      A    C
ATOM   1502  O   MET A 305     188.653 176.721 -12.082  1.00 23.54      A    O
ATOM   1503  N   HIS A 306     187.934 177.852 -10.290  1.00 21.16      A    N
ATOM   1504  CA  HIS A 306     187.363 176.655  -9.703  1.00 17.32      A    C
ATOM   1505  CB  HIS A 306     188.312 176.035  -8.671  1.00 15.79      A    C
ATOM   1506  CG  HIS A 306     188.498 176.853  -7.431  1.00 14.36      A    C
ATOM   1507  CD2 HIS A 306     187.895 176.788  -6.218  1.00 12.29      A    C
ATOM   1508  ND1 HIS A 306     189.411 177.880  -7.347  1.00 15.91      A    N
ATOM   1509  CE1 HIS A 306     189.366 178.411  -6.139  1.00 13.45      A    C
ATOM   1510  NE2 HIS A 306     188.453 177.767  -5.434  1.00 10.38      A    N
ATOM   1511  C   HIS A 306     186.000 176.913  -9.078  1.00 18.65      A    C
ATOM   1512  O   HIS A 306     185.528 178.063  -9.040  1.00 15.46      A    O
ATOM   1513  N   ASP A 307     185.376 175.822  -8.622  1.00 18.40      A    N
ATOM   1514  CA  ASP A 307     184.057 175.824  -7.986  1.00 20.30      A    C
ATOM   1515  CB  ASP A 307     182.969 175.631  -9.035  1.00 24.34      A    C
ATOM   1516  CG  ASP A 307     183.174 174.374  -9.865  1.00 30.83      A    C
ATOM   1517  OD1 ASP A 307     183.553 173.321  -9.286  1.00 33.25      A    O
ATOM   1518  OD2 ASP A 307     182.949 174.430 -11.098  1.00 33.88      A    O
ATOM   1519  C   ASP A 307     183.948 174.721  -6.917  1.00 19.00      A    C
ATOM   1520  O   ASP A 307     184.973 174.176  -6.486  1.00 21.60      A    O
ATOM   1521  N   GLU A 308     182.720 174.368  -6.519  1.00 18.46      A    N
ATOM   1522  CA  GLU A 308     182.507 173.358  -5.479  1.00 17.19      A    C
ATOM   1523  CB  GLU A 308     181.014 173.257  -5.075  1.00 19.78      A    C
ATOM   1524  CG  GLU A 308     180.067 172.849  -6.190  1.00 29.00      A    C
ATOM   1525  CD  GLU A 308     178.600 172.827  -5.777  1.00 33.58      A    C
ATOM   1526  OE1 GLU A 308     178.121 173.800  -5.139  1.00 38.06      A    O
ATOM   1527  OE2 GLU A 308     177.910 171.836  -6.115  1.00 41.55      A    O
ATOM   1528  C   GLU A 308     183.048 171.977  -5.820  1.00 14.99      A    C
ATOM   1529  O   GLU A 308     183.135 171.106  -4.946  1.00 14.14      A    O
ATOM   1530  N   LYS A 309     183.452 171.780  -7.066  1.00 12.83      A    N
ATOM   1531  CA  LYS A 309     183.997 170.488  -7.449  1.00 16.26      A    C
ATOM   1532  CB  LYS A 309     184.061 170.376  -8.972  1.00 18.82      A    C
ATOM   1533  CG  LYS A 309     182.731 170.086  -9.593  1.00 21.29      A    C
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ATOM   1534  CD  LYS A 309     182.215 168.769  -9.041  1.00 29.52      A     C
ATOM   1535  CE  LYS A 309     181.020 168.263  -9.842  1.00 30.17      A     C
ATOM   1536  NZ  LYS A 309     180.649 166.912  -9.358  1.00 35.57      A     N
ATOM   1537  C   LYS A 309     185.370 170.202  -6.826  1.00 16.49      A     C
ATOM   1538  O   LYS A 309     185.816 169.051  -6.804  1.00 15.73      A     O
ATOM   1539  N   VAL A 310     186.025 171.233  -6.291  1.00 15.44      A     N
ATOM   1540  CA  VAL A 310     187.319 171.020  -5.662  1.00 13.90      A     C
ATOM   1541  CB  VAL A 310     188.051 172.358  -5.281  1.00 15.52      A     C
ATOM   1542  CG1 VAL A 310     188.197 173.247  -6.503  1.00  7.36      A     C
ATOM   1543  CG2 VAL A 310     187.332 173.065  -4.151  1.00 12.70      A     C
ATOM   1544  C   VAL A 310     187.132 170.159  -4.410  1.00 17.23      A     C
ATOM   1545  O   VAL A 310     188.008 169.357  -4.083  1.00 19.39      A     O
ATOM   1546  N   ASP A 311     186.013 170.306  -3.700  1.00 14.90      A     N
ATOM   1547  CA  ASP A 311     185.804 169.452  -2.541  1.00 14.20      A     C
ATOM   1548  CB  ASP A 311     184.574 169.876  -1.727  1.00 16.81      A     C
ATOM   1549  CG  ASP A 311     184.778 171.192  -0.974  1.00 16.28      A     C
ATOM   1550  OD1 ASP A 311     185.950 171.565  -0.731  1.00 12.12      A     O
ATOM   1551  OD2 ASP A 311     183.756 171.832  -0.617  1.00 13.33      A     O
ATOM   1552  C   ASP A 311     185.640 167.983  -2.979  1.00 14.98      A     C
ATOM   1553  O   ASP A 311     185.953 167.090  -2.202  1.00 16.71      A     O
ATOM   1554  N   LEU A 312     185.162 167.723  -4.205  1.00 13.32      A     N
ATOM   1555  CA  LEU A 312     185.019 166.342  -4.703  1.00 13.83      A     C
ATOM   1556  CB  LEU A 312     184.238 166.279  -6.028  1.00 12.75      A     C
ATOM   1557  CG  LEU A 312     182.708 166.216  -6.008  1.00 16.02      A     C
ATOM   1558  CD1 LEU A 312     182.269 164.959  -5.273  1.00 14.12      A     C
ATOM   1559  CD2 LEU A 312     182.118 167.482  -5.336  1.00 16.09      A     C
ATOM   1560  C   LEU A 312     186.399 165.749  -4.951  1.00 13.94      A     C
ATOM   1561  O   LEU A 312     186.616 164.546  -4.837  1.00 15.77      A     O
ATOM   1562  N   TRP A 313     187.338 166.594  -5.329  1.00 15.19      A     N
ATOM   1563  CA  TRP A 313     188.673 166.093  -5.553  1.00 13.67      A     C
ATOM   1564  CB  TRP A 313     189.505 167.131  -6.287  1.00 10.13      A     C
ATOM   1565  CG  TRP A 313     190.948 166.889  -6.208  1.00  9.91      A     C
ATOM   1566  CD2 TRP A 313     191.775 166.296  -7.214  1.00 11.32      A     C
ATOM   1567  CE2 TRP A 313     193.109 166.370  -6.750  1.00 10.99      A     C
ATOM   1568  CE3 TRP A 313     191.523 165.729  -8.471  1.00  8.98      A     C
ATOM   1569  CD1 TRP A 313     191.784 167.266  -5.199  1.00 10.59      A     C
ATOM   1570  NE1 TRP A 313     193.083 166.960  -5.513  1.00  9.03      A     N
ATOM   1571  CZ2 TRP A 313     194.190 165.890  -7.494  1.00 10.17      A     C
ATOM   1572  CZ3 TRP A 313     192.598 165.254  -9.214  1.00 13.43      A     C
ATOM   1573  CH2 TRP A 313     193.923 165.344  -8.723  1.00 12.05      A     C
ATOM   1574  C   TRP A 313     189.258 165.776  -4.183  1.00 12.20      A     C
ATOM   1575  O   TRP A 313     189.803 164.704  -3.983  1.00 11.38      A     O
ATOM   1576  N   SER A 314     189.111 166.700  -3.236  1.00 13.68      A     N
ATOM   1577  CA  SER A 314     189.636 166.492  -1.893  1.00 16.07      A     C
ATOM   1578  CB  SER A 314     189.229 167.643  -0.984  1.00 17.53      A     C
ATOM   1579  OG  SER A 314     190.261 168.612  -0.972  1.00 25.41      A     O
ATOM   1580  C   SER A 314     189.172 165.168  -1.283  1.00 16.32      A     C
ATOM   1581  O   SER A 314     189.942 164.475  -0.628  1.00 15.29      A     O
ATOM   1582  N   LEU A 315     187.907 164.838  -1.517  1.00 15.55      A     N
ATOM   1583  CA  LEU A 315     187.311 163.618  -1.029  1.00 15.03      A     C
ATOM   1584  CB  LEU A 315     185.822 163.597  -1.392  1.00 15.51      A     C
ATOM   1585  CG  LEU A 315     184.951 162.599  -0.624  1.00 17.84      A     C
ATOM   1586  CD1 LEU A 315     184.877 163.015   0.840  1.00 17.24      A     C
ATOM   1587  CD2 LEU A 315     183.555 162.551  -1.222  1.00 15.53      A     C
ATOM   1588  C   LEU A 315     188.031 162.402  -1.626  1.00 15.76      A     C
ATOM   1589  O   LEU A 315     188.237 161.399  -0.935  1.00 16.26      A     O
ATOM   1590  N   GLY A 316     188.414 162.480  -2.899  1.00 13.03      A     N
ATOM   1591  CA  GLY A 316     189.109 161.357  -3.507  1.00 12.73      A     C
ATOM   1592  C   GLY A 316     190.486 161.200  -2.878  1.00 13.41      A     C
ATOM   1593  O   GLY A 316     190.933 160.092  -2.576  1.00 11.78      A     O
ATOM   1594  N   VAL A 317     191.167 162.329  -2.702  1.00 12.49      A     N
ATOM   1595  CA  VAL A 317     192.481 162.351  -2.089  1.00 11.35      A     C
ATOM   1596  CB  VAL A 317     193.034 163.812  -1.984  1.00 11.65      A     C
ATOM   1597  CG1 VAL A 317     194.231 163.859  -1.079  1.00 10.54      A     C
ATOM   1598  CG2 VAL A 317     193.431 164.323  -3.360  1.00  8.84      A     C
ATOM   1599  C   VAL A 317     192.362 161.759  -0.680  1.00 12.97      A     C
ATOM   1600  O   VAL A 317     193.152 160.887  -0.280  1.00 11.80      A     O
ATOM   1601  N   LEU A 318     191.355 162.229   0.052  1.00 10.99      A     N
ATOM   1602  CA  LEU A 318     191.097 161.785   1.408  1.00 12.40      A     C
ATOM   1603  CB  LEU A 318     189.958 162.618   2.007  1.00 15.26      A     C
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ATOM	1604	CG	LEU	A	318	189.652	162.340	3.475	1.00	15.97	A	C
ATOM	1605	CD1	LEU	A	318	190.731	162.990	4.377	1.00	14.54	A	C
ATOM	1606	CD2	LEU	A	318	188.310	162.873	3.783	1.00	13.89	A	C
ATOM	1607	C	LEU	A	318	190.760	160.286	1.527	1.00	12.64	A	C
ATOM	1608	O	LEU	A	318	191.232	159.610	2.437	1.00	10.92	A	O
ATOM	1609	N	CYS	A	319	189.936	159.778	0.617	1.00	12.91	A	N
ATOM	1610	CA	CYS	A	319	189.547	158.372	0.623	1.00	15.63	A	C
ATOM	1611	CB	CYS	A	319	188.512	158.092	-0.479	1.00	20.57	A	C
ATOM	1612	SG	CYS	A	319	187.933	156.363	-0.531	1.00	23.04	A	S
ATOM	1613	C	CYS	A	319	190.757	157.490	0.394	1.00	15.66	A	C
ATOM	1614	O	CYS	A	319	190.906	156.439	1.025	1.00	15.68	A	O
ATOM	1615	N	TYR	A	320	191.614	157.922	-0.527	1.00	13.11	A	N
ATOM	1616	CA	TYR	A	320	192.833	157.194	-0.827	1.00	12.42	A	C
ATOM	1617	CB	TYR	A	320	193.560	157.870	-1.999	1.00	12.90	A	C
ATOM	1618	CG	TYR	A	320	194.879	157.235	-2.378	1.00	11.79	A	C
ATOM	1619	CD1	TYR	A	320	196.014	157.423	-1.594	1.00	11.63	A	C
ATOM	1620	CE1	TYR	A	320	197.213	156.803	-1.906	1.00	13.39	A	C
ATOM	1621	CD2	TYR	A	320	194.978	156.414	-3.495	1.00	13.02	A	C
ATOM	1622	CE2	TYR	A	320	196.167	155.790	-3.822	1.00	14.81	A	C
ATOM	1623	CZ	TYR	A	320	197.287	155.980	-3.023	1.00	16.61	A	C
ATOM	1624	OH	TYR	A	320	198.459	155.299	-3.325	1.00	14.17	A	O
ATOM	1625	C	TYR	A	320	193.727	157.138	0.428	1.00	13.58	A	C
ATOM	1626	O	TYR	A	320	194.217	156.062	0.797	1.00	12.75	A	O
ATOM	1627	N	GLU	A	321	193.922	158.287	1.083	1.00	12.98	A	N
ATOM	1628	CA	GLU	A	321	194.752	158.359	2.289	1.00	13.87	A	C
ATOM	1629	CB	GLU	A	321	194.858	159.798	2.815	1.00	15.03	A	C
ATOM	1630	CG	GLU	A	321	196.109	160.011	3.685	1.00	22.02	A	C
ATOM	1631	CD	GLU	A	321	196.204	161.394	4.326	1.00	27.52	A	C
ATOM	1632	OE1	GLU	A	321	195.889	162.413	3.676	1.00	30.94	A	O
ATOM	1633	OE2	GLU	A	321	196.621	161.470	5.494	1.00	31.35	A	O
ATOM	1634	C	GLU	A	321	194.218	157.470	3.416	1.00	14.01	A	C
ATOM	1635	O	GLU	A	321	194.986	156.877	4.166	1.00	14.13	A	O
ATOM	1636	N	PHE	A	322	192.899	157.384	3.536	1.00	13.55	A	N
ATOM	1637	CA	PHE	A	322	192.291	156.568	4.576	1.00	12.09	A	C
ATOM	1638	CB	PHE	A	322	190.765	156.710	4.570	1.00	6.70	A	C
ATOM	1639	CG	PHE	A	322	190.272	157.975	5.176	1.00	6.79	A	C
ATOM	1640	CD1	PHE	A	322	191.144	158.836	5.838	1.00	7.89	A	C
ATOM	1641	CD2	PHE	A	322	188.933	158.312	5.106	1.00	8.09	A	C
ATOM	1642	CE1	PHE	A	322	190.688	160.011	6.416	1.00	6.90	A	C
ATOM	1643	CE2	PHE	A	322	188.464	159.497	5.689	1.00	10.00	A	C
ATOM	1644	CZ	PHE	A	322	189.346	160.340	6.345	1.00	8.24	A	C
ATOM	1645	C	PHE	A	322	192.629	155.107	4.398	1.00	12.56	A	C
ATOM	1646	O	PHE	A	322	192.888	154.401	5.375	1.00	14.57	A	O
ATOM	1647	N	LEU	A	323	192.629	154.663	3.147	1.00	11.23	A	N
ATOM	1648	CA	LEU	A	323	192.876	153.269	2.830	1.00	10.81	A	C
ATOM	1649	CB	LEU	A	323	192.181	152.923	1.510	1.00	11.58	A	C
ATOM	1650	CG	LEU	A	323	190.650	152.911	1.467	1.00	11.82	A	C
ATOM	1651	CD1	LEU	A	323	190.149	152.693	0.033	1.00	1.00	A	C
ATOM	1652	CD2	LEU	A	323	190.158	151.799	2.429	1.00	8.83	A	C
ATOM	1653	C	LEU	A	323	194.341	152.888	2.725	1.00	13.31	A	C
ATOM	1654	O	LEU	A	323	194.734	151.769	3.072	1.00	13.08	A	O
ATOM	1655	N	VAL	A	324	195.144	153.832	2.253	1.00	13.79	A	N
ATOM	1656	CA	VAL	A	324	196.552	153.589	2.028	1.00	13.43	A	C
ATOM	1657	CB	VAL	A	324	196.958	154.241	0.703	1.00	13.53	A	C
ATOM	1658	CG1	VAL	A	324	198.387	153.909	0.365	1.00	10.33	A	C
ATOM	1659	CG2	VAL	A	324	196.009	153.788	-0.384	1.00	10.31	A	C
ATOM	1660	C	VAL	A	324	197.439	154.085	3.153	1.00	15.36	A	C
ATOM	1661	O	VAL	A	324	198.496	153.525	3.419	1.00	15.10	A	O
ATOM	1662	N	GLY	A	325	197.019	155.146	3.819	1.00	16.58	A	N
ATOM	1663	CA	GLY	A	325	197.834	155.647	4.902	1.00	18.98	A	C
ATOM	1664	C	GLY	A	325	198.687	156.819	4.459	1.00	22.31	A	C
ATOM	1665	O	GLY	A	325	199.484	157.330	5.245	1.00	22.91	A	O
ATOM	1666	N	LYS	A	326	198.556	157.238	3.204	1.00	22.34	A	N
ATOM	1667	CA	LYS	A	326	199.299	158.399	2.743	1.00	20.73	A	C
ATOM	1668	CB	LYS	A	326	200.775	158.057	2.468	1.00	22.54	A	C
ATOM	1669	CG	LYS	A	326	201.002	157.016	1.405	1.00	26.76	A	C
ATOM	1670	CD	LYS	A	326	202.478	156.728	1.181	1.00	29.37	A	C
ATOM	1671	CE	LYS	A	326	202.635	155.634	0.108	1.00	36.99	A	C
ATOM	1672	NZ	LYS	A	326	204.059	155.235	-0.146	1.00	40.73	A	N
ATOM	1673	C	LYS	A	326	198.627	158.927	1.496	1.00	18.10	A	C

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ATOM   1674  O   LYS A 326     198.050 158.173   0.745  1.00 18.75      A    O
ATOM   1675  N   PRO A 327     198.657 160.254   1.290  1.00 19.06      A    N
ATOM   1676  CD  PRO A 327     199.416 161.265   2.050  1.00 18.18      A    C
ATOM   1677  CA  PRO A 327     198.046 160.877   0.111  1.00 16.77      A    C
ATOM   1678  CB  PRO A 327     198.349 162.358   0.331  1.00 18.27      A    C
ATOM   1679  CG  PRO A 327     199.652 162.318   0.997  1.00 17.79      A    C
ATOM   1680  C   PRO A 327     198.719 160.334  -1.156  1.00 15.47      A    C
ATOM   1681  O   PRO A 327     199.920 160.074  -1.165  1.00 17.98      A    O
ATOM   1682  N   PRO A 328     197.967 160.221  -2.256  1.00 15.81      A    N
ATOM   1683  CD  PRO A 328     196.629 160.830  -2.419  1.00 13.52      A    C
ATOM   1684  CA  PRO A 328     198.467 159.699  -3.540  1.00 13.75      A    C
ATOM   1685  CB  PRO A 328     197.183 159.511  -4.345  1.00 15.58      A    C
ATOM   1686  CG  PRO A 328     196.384 160.712  -3.922  1.00 15.99      A    C
ATOM   1687  C   PRO A 328     199.517 160.502  -4.312  1.00 14.29      A    C
ATOM   1688  O   PRO A 328     200.226 159.947  -5.150  1.00 15.51      A    O
ATOM   1689  N   PHE A 329     199.627 161.798  -4.039  1.00 15.34      A    N
ATOM   1690  CA  PHE A 329     200.600 162.627  -4.758  1.00 16.02      A    C
ATOM   1691  CB  PHE A 329     199.880 163.832  -5.357  1.00 11.57      A    C
ATOM   1692  CG  PHE A 329     198.677 163.456  -6.171  1.00 10.41      A    C
ATOM   1693  CD1 PHE A 329     198.831 162.822  -7.393  1.00  7.22      A    C
ATOM   1694  CD2 PHE A 329     197.389 163.646  -5.672  1.00 10.88      A    C
ATOM   1695  CE1 PHE A 329     197.722 162.365  -8.117  1.00 11.91      A    C
ATOM   1696  CE2 PHE A 329     196.267 163.194  -6.387  1.00  9.29      A    C
ATOM   1697  CZ  PHE A 329     196.435 162.548  -7.611  1.00 11.49      A    C
ATOM   1698  C   PHE A 329     201.774 163.073  -3.896  1.00 18.50      A    C
ATOM   1699  O   PHE A 329     202.501 163.999  -4.242  1.00 17.82      A    O
ATOM   1700  N   GLU A 330     201.968 162.411  -2.765  1.00 20.96      A    N
ATOM   1701  CA  GLU A 330     203.061 162.781  -1.872  1.00 25.68      A    C
ATOM   1702  CB  GLU A 330     203.042 161.868  -0.653  1.00 28.63      A    C
ATOM   1703  CG  GLU A 330     203.889 162.292   0.527  1.00 35.48      A    C
ATOM   1704  CD  GLU A 330     203.618 161.381   1.725  1.00 40.14      A    C
ATOM   1705  OE1 GLU A 330     203.825 161.798   2.890  1.00 43.93      A    O
ATOM   1706  OE2 GLU A 330     203.186 160.230   1.490  1.00 43.19      A    O
ATOM   1707  C   GLU A 330     204.404 162.666  -2.593  1.00 25.36      A    C
ATOM   1708  O   GLU A 330     204.712 161.627  -3.177  1.00 25.32      A    O
ATOM   1709  N   ALA A 331     205.195 163.733  -2.551  1.00 23.31      A    N
ATOM   1710  CA  ALA A 331     206.506 163.745  -3.184  1.00 23.23      A    C
ATOM   1711  CB  ALA A 331     206.432 164.479  -4.500  1.00 19.73      A    C
ATOM   1712  C   ALA A 331     207.503 164.429  -2.239  1.00 24.76      A    C
ATOM   1713  O   ALA A 331     207.109 165.040  -1.249  1.00 22.52      A    O
ATOM   1714  N   ASN A 332     208.794 164.320  -2.542  1.00 27.89      A    N
ATOM   1715  CA  ASN A 332     209.822 164.922  -1.692  1.00 30.47      A    C
ATOM   1716  CB  ASN A 332     211.174 164.246  -1.975  1.00 32.87      A    C
ATOM   1717  CG  ASN A 332     211.190 162.794  -1.504  1.00 37.45      A    C
ATOM   1718  OD1 ASN A 332     210.716 162.504  -0.401  1.00 36.73      A    O
ATOM   1719  ND2 ASN A 332     211.729 161.883  -2.321  1.00 37.38      A    N
ATOM   1720  C   ASN A 332     209.942 166.462  -1.771  1.00 29.91      A    C
ATOM   1721  O   ASN A 332     210.601 167.073  -0.928  1.00 29.72      A    O
ATOM   1722  N   THR A 333     209.303 167.092  -2.754  1.00 27.34      A    N
ATOM   1723  CA  THR A 333     209.369 168.544  -2.881  1.00 25.63      A    C
ATOM   1724  CB  THR A 333     210.411 168.968  -3.919  1.00 27.29      A    C
ATOM   1725  OG1 THR A 333     209.862 168.766  -5.232  1.00 25.31      A    O
ATOM   1726  CG2 THR A 333     211.683 168.122  -3.769  1.00 28.40      A    C
ATOM   1727  C   THR A 333     208.021 169.099  -3.341  1.00 24.25      A    C
ATOM   1728  O   THR A 333     207.168 168.355  -3.832  1.00 24.65      A    O
ATOM   1729  N   TYR A 334     207.839 170.406  -3.177  1.00 22.97      A    N
ATOM   1730  CA  TYR A 334     206.610 171.081  -3.584  1.00 24.27      A    C
ATOM   1731  CB  TYR A 334     206.670 172.557  -3.243  1.00 26.40      A    C
ATOM   1732  CG  TYR A 334     206.122 172.899  -1.885  1.00 28.73      A    C
ATOM   1733  CD1 TYR A 334     206.846 172.639  -0.725  1.00 29.53      A    C
ATOM   1734  CE1 TYR A 334     206.322 172.945   0.537  1.00 32.11      A    C
ATOM   1735  CD2 TYR A 334     204.863 173.476  -1.759  1.00 28.50      A    C
ATOM   1736  CE2 TYR A 334     204.329 173.794  -0.497  1.00 29.43      A    C
ATOM   1737  CZ  TYR A 334     205.072 173.518   0.645  1.00 31.88      A    C
ATOM   1738  OH  TYR A 334     204.597 173.783   1.910  1.00 34.80      A    O
ATOM   1739  C   TYR A 334     206.379 170.979  -5.088  1.00 25.01      A    C
ATOM   1740  O   TYR A 334     205.267 170.712  -5.567  1.00 24.09      A    O
ATOM   1741  N   GLN A 335     207.445 171.221  -5.831  1.00 24.15      A    N
ATOM   1742  CA  GLN A 335     207.401 171.183  -7.272  1.00 26.26      A    C
ATOM   1743  CB  GLN A 335     208.763 171.616  -7.820  1.00 30.16      A    C
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ATOM   1744  CG  GLN A 335     208.690 172.407  -9.123  1.00 37.20      A    C
ATOM   1745  CD  GLN A 335     209.938 173.249  -9.353  1.00 44.29      A    C
ATOM   1746  OE1 GLN A 335     211.075 172.716  -9.361  1.00 45.86      A    O
ATOM   1747  NE2 GLN A 335     209.749 174.581  -9.540  1.00 45.65      A    N
ATOM   1748  C   GLN A 335     207.014 169.785  -7.766  1.00 24.06      A    C
ATOM   1749  O   GLN A 335     206.182 169.643  -8.661  1.00 20.60      A    O
ATOM   1750  N   GLU A 336     207.596 168.746  -7.179  1.00 23.21      A    N
ATOM   1751  CA  GLU A 336     207.243 167.407  -7.624  1.00 22.61      A    C
ATOM   1752  CB  GLU A 336     208.183 166.360  -7.022  1.00 19.74      A    C
ATOM   1753  CG  GLU A 336     207.807 164.932  -7.350  1.00 27.97      A    C
ATOM   1754  CD  GLU A 336     207.852 164.603  -8.845  1.00 35.28      A    C
ATOM   1755  OE1 GLU A 336     207.231 163.579  -9.236  1.00 38.15      A    O
ATOM   1756  OE2 GLU A 336     208.508 165.350  -9.628  1.00 39.74      A    O
ATOM   1757  C   GLU A 336     205.775 167.056  -7.327  1.00 23.14      A    C
ATOM   1758  O   GLU A 336     205.138 166.363  -8.124  1.00 23.03      A    O
ATOM   1759  N   THR A 337     205.241 167.517  -6.196  1.00 21.09      A    N
ATOM   1760  CA  THR A 337     203.849 167.229  -5.868  1.00 21.21      A    C
ATOM   1761  CB  THR A 337     203.541 167.589  -4.380  1.00 22.66      A    C
ATOM   1762  OG1 THR A 337     204.334 166.744  -3.537  1.00 24.71      A    O
ATOM   1763  CG2 THR A 337     202.072 167.366  -4.030  1.00 16.15      A    C
ATOM   1764  C   THR A 337     202.918 167.944  -6.855  1.00 19.71      A    C
ATOM   1765  O   THR A 337     201.978 167.329  -7.346  1.00 21.88      A    O
ATOM   1766  N   TYR A 338     203.191 169.210  -7.171  1.00 17.76      A    N
ATOM   1767  CA  TYR A 338     202.404 169.982  -8.151  1.00 17.94      A    C
ATOM   1768  CB  TYR A 338     203.051 171.348  -8.416  1.00 19.72      A    C
ATOM   1769  CG  TYR A 338     202.924 172.309  -7.282  1.00 21.47      A    C
ATOM   1770  CD1 TYR A 338     203.927 173.231  -7.014  1.00 26.12      A    C
ATOM   1771  CE1 TYR A 338     203.780 174.172  -6.003  1.00 31.99      A    C
ATOM   1772  CD2 TYR A 338     201.775 172.333  -6.506  1.00 23.72      A    C
ATOM   1773  CE2 TYR A 338     201.609 173.256  -5.498  1.00 28.25      A    C
ATOM   1774  CZ  TYR A 338     202.605 174.184  -5.255  1.00 32.26      A    C
ATOM   1775  OH  TYR A 338     202.398 175.197  -4.343  1.00 37.49      A    O
ATOM   1776  C   TYR A 338     202.342 169.248  -9.480  1.00 17.24      A    C
ATOM   1777  O   TYR A 338     201.303 169.202 -10.143  1.00 17.93      A    O
ATOM   1778  N   LYS A 339     203.492 168.704  -9.869  1.00 18.06      A    N
ATOM   1779  CA  LYS A 339     203.635 167.967 -11.112  1.00 15.13      A    C
ATOM   1780  CB  LYS A 339     205.087 167.521 -11.318  1.00 15.66      A    C
ATOM   1781  CG  LYS A 339     205.282 166.761 -12.647  1.00 25.11      A    C
ATOM   1782  CD  LYS A 339     206.675 166.164 -12.838  1.00 28.61      A    C
ATOM   1783  CE  LYS A 339     207.736 167.232 -12.973  1.00 30.48      A    C
ATOM   1784  NZ  LYS A 339     209.081 166.590 -13.128  1.00 37.06      A    N
ATOM   1785  C   LYS A 339     202.734 166.747 -11.110  1.00 15.66      A    C
ATOM   1786  O   LYS A 339     201.999 166.520 -12.062  1.00 16.79      A    O
ATOM   1787  N   ARG A 340     202.788 165.963 -10.038  1.00 14.01      A    N
ATOM   1788  CA  ARG A 340     201.980 164.754  -9.941  1.00 17.25      A    C
ATOM   1789  CB  ARG A 340     202.444 163.917  -8.749  1.00 17.92      A    C
ATOM   1790  CG  ARG A 340     203.675 163.112  -9.058  1.00 20.94      A    C
ATOM   1791  CD  ARG A 340     204.273 162.632  -7.805  1.00 26.11      A    C
ATOM   1792  NE  ARG A 340     205.579 162.024  -8.000  1.00 30.74      A    N
ATOM   1793  CZ  ARG A 340     206.247 161.430  -7.014  1.00 34.14      A    C
ATOM   1794  NH1 ARG A 340     205.697 161.387  -5.805  1.00 36.45      A    N
ATOM   1795  NH2 ARG A 340     207.447 160.886  -7.219  1.00 32.82      A    N
ATOM   1796  C   ARG A 340     200.467 164.980  -9.876  1.00 16.32      A    C
ATOM   1797  O   ARG A 340     199.692 164.177 -10.393  1.00 13.54      A    O
ATOM   1798  N   ILE A 341     200.052 166.068  -9.242  1.00 16.44      A    N
ATOM   1799  CA  ILE A 341     198.637 166.396  -9.147  1.00 15.90      A    C
ATOM   1800  CB  ILE A 341     198.425 167.544  -8.133  1.00 14.61      A    C
ATOM   1801  CG2 ILE A 341     197.031 168.173  -8.284  1.00 10.21      A    C
ATOM   1802  CG1 ILE A 341     198.636 166.991  -6.722  1.00  9.86      A    C
ATOM   1803  CD1 ILE A 341     198.865 168.066  -5.710  1.00 10.30      A    C
ATOM   1804  C   ILE A 341     198.139 166.813 -10.524  1.00 16.94      A    C
ATOM   1805  O   ILE A 341     197.099 166.346 -11.003  1.00 15.49      A    O
ATOM   1806  N   SER A 342     198.911 167.677 -11.165  1.00 17.49      A    N
ATOM   1807  CA  SER A 342     198.556 168.185 -12.479  1.00 19.50      A    C
ATOM   1808  CB  SER A 342     199.638 169.153 -12.927  1.00 19.12      A    C
ATOM   1809  OG  SER A 342     199.178 169.899 -14.023  1.00 28.84      A    O
ATOM   1810  C   SER A 342     198.385 167.065 -13.518  1.00 18.65      A    C
ATOM   1811  O   SER A 342     197.544 167.157 -14.414  1.00 17.15      A    O
ATOM   1812  N   ARG A 343     199.209 166.027 -13.391  1.00 16.76      A    N
ATOM   1813  CA  ARG A 343     199.187 164.881 -14.291  1.00 16.82      A    C
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ATOM   1814  CB  ARG A 343     200.563 164.214 -14.356  1.00 19.40      A    C
ATOM   1815  CG  ARG A 343     201.744 165.034 -14.873  1.00 20.85      A    C
ATOM   1816  CD  ARG A 343     202.986 164.139 -14.768  1.00 22.63      A    C
ATOM   1817  NE  ARG A 343     204.181 164.667 -15.420  1.00 29.67      A    N
ATOM   1818  CZ  ARG A 343     205.296 163.964 -15.619  1.00 29.30      A    C
ATOM   1819  NH1 ARG A 343     205.362 162.702 -15.211  1.00 27.60      A    N
ATOM   1820  NH2 ARG A 343     206.337 164.521 -16.239  1.00 30.90      A    N
ATOM   1821  C   ARG A 343     198.213 163.833 -13.749  1.00 17.95      A    C
ATOM   1822  O   ARG A 343     197.789 162.927 -14.470  1.00 18.61      A    O
ATOM   1823  N   VAL A 344     197.880 163.963 -12.465  1.00 16.47      A    N
ATOM   1824  CA  VAL A 344     197.014 163.027 -11.767  1.00 15.15      A    C
ATOM   1825  CB  VAL A 344     195.644 162.882 -12.427  1.00 14.04      A    C
ATOM   1826  CG1 VAL A 344     194.791 161.919 -11.603  1.00 14.73      A    C
ATOM   1827  CG2 VAL A 344     194.949 164.217 -12.503  1.00 14.41      A    C
ATOM   1828  C   VAL A 344     197.751 161.702 -11.847  1.00 19.48      A    C
ATOM   1829  O   VAL A 344     197.240 160.697 -12.362  1.00 17.59      A    O
ATOM   1830  N   GLU A 345     198.970 161.733 -11.320  1.00 20.63      A    N
ATOM   1831  CA  GLU A 345     199.883 160.600 -11.314  1.00 21.68      A    C
ATOM   1832  CB  GLU A 345     201.297 161.116 -11.635  1.00 22.57      A    C
ATOM   1833  CG  GLU A 345     202.291 160.066 -12.115  1.00 29.02      A    C
ATOM   1834  CD  GLU A 345     203.609 160.693 -12.596  1.00 34.43      A    C
ATOM   1835  OE1 GLU A 345     203.572 161.826 -13.143  1.00 41.54      A    O
ATOM   1836  OE2 GLU A 345     204.677 160.062 -12.448  1.00 34.88      A    O
ATOM   1837  C   GLU A 345     199.906 159.839  -9.990  1.00 21.02      A    C
ATOM   1838  O   GLU A 345     200.516 160.289  -9.009  1.00 22.86      A    O
ATOM   1839  N   PHE A 346     199.260 158.679  -9.953  1.00 20.71      A    N
ATOM   1840  CA  PHE A 346     199.268 157.868  -8.730  1.00 20.54      A    C
ATOM   1841  CB  PHE A 346     198.272 158.454  -7.705  1.00 19.53      A    C
ATOM   1842  CG  PHE A 346     196.835 158.138  -8.013  1.00 21.11      A    C
ATOM   1843  CD1 PHE A 346     196.203 157.064  -7.403  1.00 22.02      A    C
ATOM   1844  CD2 PHE A 346     196.130 158.888  -8.936  1.00 18.36      A    C
ATOM   1845  CE1 PHE A 346     194.878 156.744  -7.713  1.00 24.10      A    C
ATOM   1846  CE2 PHE A 346     194.807 158.574  -9.253  1.00 23.07      A    C
ATOM   1847  CZ  PHE A 346     194.181 157.500  -8.640  1.00 22.64      A    C
ATOM   1848  C   PHE A 346     198.893 156.424  -9.065  1.00 19.41      A    C
ATOM   1849  O   PHE A 346     198.376 156.142 -10.153  1.00 21.26      A    O
ATOM   1850  N   THR A 347     199.158 155.512  -8.137  1.00 17.51      A    N
ATOM   1851  CA  THR A 347     198.809 154.113  -8.335  1.00 15.60      A    C
ATOM   1852  CB  THR A 347     200.042 153.259  -8.736  1.00 17.00      A    C
ATOM   1853  OG1 THR A 347     201.113 153.494  -7.812  1.00 20.54      A    O
ATOM   1854  CG2 THR A 347     200.506 153.617 -10.145  1.00 14.88      A    C
ATOM   1855  C   THR A 347     198.245 153.623  -7.026  1.00 14.01      A    C
ATOM   1856  O   THR A 347     198.322 154.324  -6.030  1.00 14.17      A    O
ATOM   1857  N   PHE A 348     197.659 152.434  -7.029  1.00 14.30      A    N
ATOM   1858  CA  PHE A 348     197.097 151.875  -5.809  1.00 15.62      A    C
ATOM   1859  CB  PHE A 348     195.673 151.335  -6.022  1.00 13.71      A    C
ATOM   1860  CG  PHE A 348     194.678 152.345  -6.553  1.00 14.90      A    C
ATOM   1861  CD1 PHE A 348     194.476 152.496  -7.926  1.00 14.48      A    C
ATOM   1862  CD2 PHE A 348     193.915 153.115  -5.678  1.00 14.25      A    C
ATOM   1863  CE1 PHE A 348     193.520 153.399  -8.421  1.00 13.33      A    C
ATOM   1864  CE2 PHE A 348     192.956 154.020  -6.160  1.00 12.61      A    C
ATOM   1865  CZ  PHE A 348     192.758 154.162  -7.530  1.00 13.12      A    C
ATOM   1866  C   PHE A 348     197.936 150.690  -5.379  1.00 17.39      A    C
ATOM   1867  O   PHE A 348     198.493 149.986  -6.222  1.00 17.79      A    O
ATOM   1868  N   PRO A 349     198.077 150.478  -4.060  1.00 19.22      A    N
ATOM   1869  CD  PRO A 349     197.716 151.428  -2.984  1.00 20.64      A    C
ATOM   1870  CA  PRO A 349     198.843 149.326  -3.550  1.00 18.28      A    C
ATOM   1871  CB  PRO A 349     198.881 149.550  -2.034  1.00 19.47      A    C
ATOM   1872  CG  PRO A 349     198.663 151.042  -1.874  1.00 21.78      A    C
ATOM   1873  C   PRO A 349     197.913 148.144  -3.906  1.00 18.89      A    C
ATOM   1874  O   PRO A 349     196.765 148.365  -4.282  1.00 18.06      A    O
ATOM   1875  N   ASP A 350     198.360 146.901  -3.778  1.00 22.60      A    N
ATOM   1876  CA  ASP A 350     197.488 145.780  -4.137  1.00 24.29      A    C
ATOM   1877  CB  ASP A 350     198.312 144.494  -4.298  1.00 28.79      A    C
ATOM   1878  CG  ASP A 350     199.378 144.608  -5.404  1.00 33.91      A    C
ATOM   1879  OD1 ASP A 350     200.001 143.575  -5.741  1.00 33.53      A    O
ATOM   1880  OD2 ASP A 350     199.591 145.733  -5.928  1.00 35.29      A    O
ATOM   1881  C   ASP A 350     196.293 145.489  -3.238  1.00 23.99      A    C
ATOM   1882  O   ASP A 350     195.352 144.835  -3.671  1.00 23.48      A    O
ATOM   1883  N   PHE A 351     196.279 145.964  -2.003  1.00 22.20      A    N
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ATOM   1884  CA  PHE A 351     195.125 145.636  -1.171  1.00 23.75      A    C
ATOM   1885  CB  PHE A 351     195.510 145.662   0.300  1.00 22.72      A    C
ATOM   1886  CG  PHE A 351     196.082 146.956   0.738  1.00 20.40      A    C
ATOM   1887  CD1 PHE A 351     197.451 147.151   0.756  1.00 17.28      A    C
ATOM   1888  CD2 PHE A 351     195.245 147.994   1.111  1.00 19.08      A    C
ATOM   1889  CE1 PHE A 351     197.983 148.379   1.142  1.00 21.72      A    C
ATOM   1890  CE2 PHE A 351     195.761 149.217   1.497  1.00 19.31      A    C
ATOM   1891  CZ  PHE A 351     197.128 149.417   1.515  1.00 20.15      A    C
ATOM   1892  C   PHE A 351     193.883 146.509  -1.382  1.00 24.86      A    C
ATOM   1893  O   PHE A 351     192.826 146.215  -0.820  1.00 26.36      A    O
ATOM   1894  N   VAL A 352     193.999 147.575  -2.174  1.00 22.98      A    N
ATOM   1895  CA  VAL A 352     192.845 148.431  -2.428  1.00 22.53      A    C
ATOM   1896  CB  VAL A 352     193.297 149.810  -2.976  1.00 19.91      A    C
ATOM   1897  CG1 VAL A 352     192.105 150.680  -3.293  1.00 15.94      A    C
ATOM   1898  CG2 VAL A 352     194.164 150.489  -1.936  1.00 17.58      A    C
ATOM   1899  C   VAL A 352     191.941 147.702  -3.416  1.00 22.85      A    C
ATOM   1900  O   VAL A 352     192.351 147.406  -4.541  1.00 25.56      A    O
ATOM   1901  N   THR A 353     190.722 147.393  -2.985  1.00 20.20      A    N
ATOM   1902  CA  THR A 353     189.786 146.668  -3.833  1.00 20.47      A    C
ATOM   1903  CB  THR A 353     188.530 146.264  -3.059  1.00 18.44      A    C
ATOM   1904  OG1 THR A 353     187.777 147.445  -2.740  1.00 19.14      A    O
ATOM   1905  CG2 THR A 353     188.915 145.544  -1.786  1.00 15.00      A    C
ATOM   1906  C   THR A 353     189.331 147.452  -5.049  1.00 23.02      A    C
ATOM   1907  O   THR A 353     189.525 148.665  -5.144  1.00 21.93      A    O
ATOM   1908  N   GLU A 354     188.685 146.733  -5.960  1.00 23.98      A    N
ATOM   1909  CA  GLU A 354     188.175 147.274  -7.208  1.00 25.43      A    C
ATOM   1910  CB  GLU A 354     187.543 146.130  -8.001  1.00 30.21      A    C
ATOM   1911  CG  GLU A 354     186.780 146.540  -9.261  1.00 37.82      A    C
ATOM   1912  CD  GLU A 354     186.031 145.351  -9.890  1.00 41.79      A    C
ATOM   1913  OE1 GLU A 354     185.501 145.472 -11.025  1.00 43.51      A    O
ATOM   1914  OE2 GLU A 354     185.974 144.281  -9.224  1.00 44.80      A    O
ATOM   1915  C   GLU A 354     187.175 148.424  -7.055  1.00 24.34      A    C
ATOM   1916  O   GLU A 354     187.182 149.386  -7.840  1.00 24.85      A    O
ATOM   1917  N   GLY A 355     186.298 148.303  -6.065  1.00 20.96      A    N
ATOM   1918  CA  GLY A 355     185.289 149.314  -5.842  1.00 13.82      A    C
ATOM   1919  C   GLY A 355     185.908 150.595  -5.333  1.00 16.94      A    C
ATOM   1920  O   GLY A 355     185.529 151.694  -5.760  1.00 13.60      A    O
ATOM   1921  N   ALA A 356     186.868 150.473  -4.425  1.00 15.45      A    N
ATOM   1922  CA  ALA A 356     187.501 151.674  -3.909  1.00 19.10      A    C
ATOM   1923  CB  ALA A 356     188.475 151.326  -2.761  1.00 18.64      A    C
ATOM   1924  C   ALA A 356     188.235 152.381  -5.068  1.00 19.08      A    C
ATOM   1925  O   ALA A 356     188.203 153.604  -5.162  1.00 16.84      A    O
ATOM   1926  N   ARG A 357     188.874 151.611  -5.951  1.00 18.44      A    N
ATOM   1927  CA  ARG A 357     189.586 152.184  -7.100  1.00 18.13      A    C
ATOM   1928  CB  ARG A 357     190.349 151.113  -7.881  1.00 16.00      A    C
ATOM   1929  CG  ARG A 357     191.447 150.447  -7.112  1.00 15.75      A    C
ATOM   1930  CD  ARG A 357     192.125 149.414  -7.941  1.00 14.24      A    C
ATOM   1931  NE  ARG A 357     193.120 148.721  -7.139  1.00 18.00      A    N
ATOM   1932  CZ  ARG A 357     194.249 148.203  -7.607  1.00 18.74      A    C
ATOM   1933  NH1 ARG A 357     194.553 148.285  -8.898  1.00 21.62      A    N
ATOM   1934  NH2 ARG A 357     195.097 147.622  -6.768  1.00 20.49      A    N
ATOM   1935  C   ARG A 357     188.627 152.856  -8.062  1.00 17.28      A    C
ATOM   1936  O   ARG A 357     188.949 153.878  -8.637  1.00 16.53      A    O
ATOM   1937  N   ASP A 358     187.454 152.272  -8.261  1.00 17.73      A    N
ATOM   1938  CA  ASP A 358     186.511 152.887  -9.176  1.00 17.93      A    C
ATOM   1939  CB  ASP A 358     185.267 152.024  -9.389  1.00 21.16      A    C
ATOM   1940  CG  ASP A 358     184.269 152.688 -10.327  1.00 23.93      A    C
ATOM   1941  OD1 ASP A 358     184.508 152.671 -11.559  1.00 29.93      A    O
ATOM   1942  OD2 ASP A 358     183.266 153.257  -9.840  1.00 22.82      A    O
ATOM   1943  C   ASP A 358     186.081 154.234  -8.611  1.00 17.83      A    C
ATOM   1944  O   ASP A 358     185.996 155.206  -9.348  1.00 20.18      A    O
ATOM   1945  N   LEU A 359     185.823 154.299  -7.303  1.00 16.69      A    N
ATOM   1946  CA  LEU A 359     185.389 155.543  -6.680  1.00 15.23      A    C
ATOM   1947  CB  LEU A 359     184.873 155.292  -5.250  1.00 13.90      A    C
ATOM   1948  CG  LEU A 359     184.459 156.568  -4.482  1.00 15.76      A    C
ATOM   1949  CD1 LEU A 359     183.222 157.164  -5.105  1.00 14.16      A    C
ATOM   1950  CD2 LEU A 359     184.210 156.266  -3.027  1.00 16.19      A    C
ATOM   1951  C   LEU A 359     186.478 156.623  -6.646  1.00 15.38      A    C
ATOM   1952  O   LEU A 359     186.234 157.740  -7.071  1.00 16.61      A    O
ATOM   1953  N   ILE A 360     187.661 156.300  -6.132  1.00 15.08      A    N
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ATOM   1954  CA  ILE A 360     188.737 157.280  -6.054  1.00 16.09      A    C
ATOM   1955  CB  ILE A 360     189.972 156.694  -5.305  1.00 13.18      A    C
ATOM   1956  CG2 ILE A 360     191.132 157.645  -5.348  1.00  8.95      A    C
ATOM   1957  CG1 ILE A 360     189.613 156.445  -3.843  1.00 11.43      A    C
ATOM   1958  CD1 ILE A 360     190.486 155.406  -3.211  1.00 15.13      A    C
ATOM   1959  C   ILE A 360     189.126 157.752  -7.457  1.00 18.67      A    C
ATOM   1960  O   ILE A 360     189.433 158.935  -7.652  1.00 19.76      A    O
ATOM   1961  N   SER A 361     189.099 156.841  -8.427  1.00 17.86      A    N
ATOM   1962  CA  SER A 361     189.437 157.193  -9.792  1.00 17.51      A    C
ATOM   1963  CB  SER A 361     189.511 155.952 -10.682  1.00 18.17      A    C
ATOM   1964  OG  SER A 361     190.686 155.223 -10.384  1.00 20.30      A    O
ATOM   1965  C   SER A 361     188.438 158.163 -10.382  1.00 18.63      A    C
ATOM   1966  O   SER A 361     188.805 159.011 -11.209  1.00 19.26      A    O
ATOM   1967  N   ARG A 362     187.175 158.051  -9.977  1.00 18.68      A    N
ATOM   1968  CA  ARG A 362     186.156 158.973 -10.492  1.00 17.96      A    C
ATOM   1969  CB  ARG A 362     184.740 158.464 -10.227  1.00 18.15      A    C
ATOM   1970  CG  ARG A 362     184.389 157.189 -10.948  1.00 21.87      A    C
ATOM   1971  CD  ARG A 362     182.950 156.762 -10.710  1.00 24.92      A    C
ATOM   1972  NE  ARG A 362     182.669 155.532 -11.449  1.00 31.73      A    N
ATOM   1973  CZ  ARG A 362     182.150 155.461 -12.682  1.00 35.25      A    C
ATOM   1974  NH1 ARG A 362     181.805 156.557 -13.358  1.00 34.91      A    N
ATOM   1975  NH2 ARG A 362     182.052 154.276 -13.281  1.00 35.12      A    N
ATOM   1976  C   ARG A 362     186.287 160.332  -9.817  1.00 16.66      A    C
ATOM   1977  O   ARG A 362     186.086 161.367 -10.452  1.00 21.59      A    O
ATOM   1978  N   LEU A 363     186.602 160.348  -8.527  1.00 15.31      A    N
ATOM   1979  CA  LEU A 363     186.726 161.620  -7.814  1.00 15.39      A    C
ATOM   1980  CB  LEU A 363     186.758 161.376  -6.295  1.00 13.54      A    C
ATOM   1981  CG  LEU A 363     185.452 160.880  -5.638  1.00 14.63      A    C
ATOM   1982  CD1 LEU A 363     185.723 160.358  -4.216  1.00 12.73      A    C
ATOM   1983  CD2 LEU A 363     184.423 162.005  -5.613  1.00  7.80      A    C
ATOM   1984  C   LEU A 363     187.989 162.357  -8.252  1.00 16.50      A    C
ATOM   1985  O   LEU A 363     188.033 163.593  -8.252  1.00 16.60      A    O
ATOM   1986  N   LEU A 364     189.008 161.597  -8.656  1.00 17.23      A    N
ATOM   1987  CA  LEU A 364     190.285 162.182  -9.051  1.00 20.15      A    C
ATOM   1988  CB  LEU A 364     191.419 161.335  -8.467  1.00 18.29      A    C
ATOM   1989  CG  LEU A 364     191.504 161.377  -6.926  1.00 20.11      A    C
ATOM   1990  CD1 LEU A 364     192.737 160.607  -6.509  1.00 16.10      A    C
ATOM   1991  CD2 LEU A 364     191.576 162.820  -6.413  1.00 16.30      A    C
ATOM   1992  C   LEU A 364     190.474 162.393 -10.557  1.00 19.92      A    C
ATOM   1993  O   LEU A 364     191.511 162.052 -11.143  1.00 20.12      A    O
ATOM   1994  N   LYS A 365     189.450 162.967 -11.169  1.00 19.36      A    N
ATOM   1995  CA  LYS A 365     189.461 163.275 -12.581  1.00 19.00      A    C
ATOM   1996  CB  LYS A 365     188.039 163.289 -13.117  1.00 22.47      A    C
ATOM   1997  CG  LYS A 365     187.417 161.929 -13.243  1.00 23.42      A    C
ATOM   1998  CD  LYS A 365     188.039 161.224 -14.400  1.00 23.31      A    C
ATOM   1999  CE  LYS A 365     187.320 159.930 -14.693  1.00 24.89      A    C
ATOM   2000  NZ  LYS A 365     187.970 159.249 -15.851  1.00 30.35      A    N
ATOM   2001  C   LYS A 365     190.039 164.670 -12.715  1.00 18.75      A    C
ATOM   2002  O   LYS A 365     189.654 165.568 -11.956  1.00 15.64      A    O
ATOM   2003  N   HIS A 366     190.949 164.850 -13.676  1.00 17.07      A    N
ATOM   2004  CA  HIS A 366     191.568 166.150 -13.920  1.00 17.25      A    C
ATOM   2005  CB  HIS A 366     192.611 166.038 -15.043  1.00 15.66      A    C
ATOM   2006  CG  HIS A 366     193.302 167.331 -15.352  1.00 18.71      A    C
ATOM   2007  CD2 HIS A 366     194.437 167.877 -14.849  1.00 17.17      A    C
ATOM   2008  ND1 HIS A 366     192.763 168.283 -16.194  1.00 19.79      A    N
ATOM   2009  CE1 HIS A 366     193.530 169.361 -16.187  1.00 18.47      A    C
ATOM   2010  NE2 HIS A 366     194.552 169.141 -15.378  1.00 18.20      A    N
ATOM   2011  C   HIS A 366     190.493 167.186 -14.291  1.00 17.88      A    C
ATOM   2012  O   HIS A 366     190.553 168.334 -13.864  1.00 14.94      A    O
ATOM   2013  N   ASN A 367     189.500 166.769 -15.071  1.00 19.37      A    N
ATOM   2014  CA  ASN A 367     188.436 167.676 -15.490  1.00 22.11      A    C
ATOM   2015  CB  ASN A 367     187.841 167.205 -16.823  1.00 24.11      A    C
ATOM   2016  CG  ASN A 367     186.929 168.246 -17.452  1.00 29.29      A    C
ATOM   2017  OD1 ASN A 367     185.990 168.718 -16.827  1.00 34.30      A    O
ATOM   2018  ND2 ASN A 367     187.209 168.611 -18.688  1.00 31.42      A    N
ATOM   2019  C   ASN A 367     187.348 167.721 -14.412  1.00 22.00      A    C
ATOM   2020  O   ASN A 367     186.644 166.739 -14.198  1.00 21.37      A    O
ATOM   2021  N   PRO A 368     187.174 168.881 -13.751  1.00 22.13      A    N
ATOM   2022  CD  PRO A 368     187.763 170.174 -14.151  1.00 21.11      A    C
ATOM   2023  CA  PRO A 368     186.181 169.073 -12.682  1.00 21.45      A    C
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ATOM   2024  CB  PRO A 368     186.292 170.571 -12.377  1.00 23.08      A    C
ATOM   2025  CG  PRO A 368     187.705 170.942 -12.864  1.00 19.70      A    C
ATOM   2026  C   PRO A 368     184.755 168.638 -13.047  1.00 22.70      A    C
ATOM   2027  O   PRO A 368     184.016 168.091 -12.209  1.00 21.09      A    O
ATOM   2028  N   SER A 369     184.386 168.865 -14.303  1.00 21.10      A    N
ATOM   2029  CA  SER A 369     183.068 168.492 -14.818  1.00 25.15      A    C
ATOM   2030  CB  SER A 369     182.919 168.982 -16.263  1.00 25.61      A    C
ATOM   2031  OG  SER A 369     183.115 170.391 -16.341  1.00 37.93      A    O
ATOM   2032  C   SER A 369     182.809 166.986 -14.785  1.00 23.28      A    C
ATOM   2033  O   SER A 369     181.685 166.555 -14.591  1.00 26.91      A    O
ATOM   2034  N   GLN A 370     183.848 166.196 -14.995  1.00 20.71      A    N
ATOM   2035  CA  GLN A 370     183.744 164.749 -15.009  1.00 21.53      A    C
ATOM   2036  CB  GLN A 370     184.922 164.172 -15.785  1.00 24.23      A    C
ATOM   2037  CG  GLN A 370     184.674 164.178 -17.279  1.00 31.18      A    C
ATOM   2038  CD  GLN A 370     185.948 164.183 -18.045  1.00 38.83      A    C
ATOM   2039  OE1 GLN A 370     186.879 163.380 -17.767  1.00 41.58      A    O
ATOM   2040  NE2 GLN A 370     186.033 165.098 -19.038  1.00 43.83      A    N
ATOM   2041  C   GLN A 370     183.688 164.073 -13.665  1.00 20.69      A    C
ATOM   2042  O   GLN A 370     183.444 162.864 -13.600  1.00 19.42      A    O
ATOM   2043  N   ARG A 371     183.940 164.804 -12.585  1.00 18.88      A    N
ATOM   2044  CA  ARG A 371     183.906 164.189 -11.252  1.00 21.24      A    C
ATOM   2045  CB  ARG A 371     184.612 165.072 -10.231  1.00 17.55      A    C
ATOM   2046  CG  ARG A 371     186.104 165.158 -10.394  1.00 15.36      A    C
ATOM   2047  CD  ARG A 371     186.643 166.286  -9.564  1.00 11.86      A    C
ATOM   2048  NE  ARG A 371     187.913 166.739 -10.108  1.00 12.57      A    N
ATOM   2049  CZ  ARG A 371     188.440 167.951  -9.938  1.00 14.14      A    C
ATOM   2050  NH1 ARG A 371     187.817 168.878  -9.216  1.00 10.91      A    N
ATOM   2051  NH2 ARG A 371     189.583 168.257 -10.545  1.00  9.48      A    N
ATOM   2052  C   ARG A 371     182.440 164.038 -10.854  1.00 22.37      A    C
ATOM   2053  O   ARG A 371     181.601 164.841 -11.176  1.00 22.50      A    O
ATOM   2054  N   PRO A 372     182.141 162.957 -10.111  1.00 23.64      A    N
ATOM   2055  CD  PRO A 372     183.165 162.051  -9.512  1.00 23.75      A    C
ATOM   2056  CA  PRO A 372     180.757 162.663  -9.653  1.00 21.80      A    C
ATOM   2057  CB  PRO A 372     180.923 161.269  -9.007  1.00 22.29      A    C
ATOM   2058  CG  PRO A 372     182.365 161.227  -8.548  1.00 22.92      A    C
ATOM   2059  C   PRO A 372     180.160 163.726  -8.739  1.00 21.72      A    C
ATOM   2060  O   PRO A 372     180.875 164.579  -8.217  1.00 23.11      A    O
ATOM   2061  N   MET A 373     178.840 163.740  -8.654  1.00 20.67      A    N
ATOM   2062  CA  MET A 373     178.153 164.668  -7.731  1.00 19.68      A    C
ATOM   2063  CB  MET A 373     176.674 164.841  -8.137  1.00 25.32      A    C
ATOM   2064  CG  MET A 373     176.470 165.598  -9.397  1.00 29.58      A    C
ATOM   2065  SD  MET A 373     177.274 167.224  -9.216  1.00 44.08      A    S
ATOM   2066  CE  MET A 373     175.850 168.314  -8.571  1.00 34.35      A    C
ATOM   2067  C   MET A 373     178.231 163.942  -6.368  1.00 18.77      A    C
ATOM   2068  O   MET A 373     178.518 162.750  -6.337  1.00 14.31      A    O
ATOM   2069  N   LEU A 374     177.985 164.639  -5.257  1.00 16.82      A    N
ATOM   2070  CA  LEU A 374     178.041 163.984  -3.959  1.00 17.05      A    C
ATOM   2071  CB  LEU A 374     177.959 165.010  -2.820  1.00 15.61      A    C
ATOM   2072  CG  LEU A 374     179.224 165.888  -2.751  1.00 17.98      A    C
ATOM   2073  CD1 LEU A 374     178.940 167.269  -2.145  1.00  8.94      A    C
ATOM   2074  CD2 LEU A 374     180.290 165.125  -1.973  1.00 12.26      A    C
ATOM   2075  C   LEU A 374     176.934 162.915  -3.837  1.00 18.65      A    C
ATOM   2076  O   LEU A 374     177.122 161.885  -3.201  1.00 19.21      A    O
ATOM   2077  N   ARG A 375     175.804 163.167  -4.504  1.00 18.78      A    N
ATOM   2078  CA  ARG A 375     174.657 162.248  -4.510  1.00 20.13      A    C
ATOM   2079  CB  ARG A 375     173.504 162.813  -5.210  1.00 21.87      A    C
ATOM   2080  C   ARG A 375     175.033 160.942  -5.178  1.00 21.00      A    C
ATOM   2081  O   ARG A 375     174.457 159.916  -4.909  1.00 21.05      A    O
ATOM   2082  N   GLU A 376     175.970 161.009  -6.106  1.00 23.11      A    N
ATOM   2083  CA  GLU A 376     176.419 159.788  -6.763  1.00 23.55      A    C
ATOM   2084  CB  GLU A 376     177.142 160.139  -8.053  1.00 24.82      A    C
ATOM   2085  CG  GLU A 376     176.400 161.110  -8.977  1.00 32.25      A    C
ATOM   2086  CD  GLU A 376     177.239 161.561 -10.206  1.00 34.95      A    C
ATOM   2087  OE1 GLU A 376     177.030 162.670 -10.770  1.00 37.06      A    O
ATOM   2088  OE2 GLU A 376     178.110 160.783 -10.630  1.00 37.87      A    O
ATOM   2089  C   GLU A 376     177.380 158.962  -5.852  1.00 23.36      A    C
ATOM   2090  O   GLU A 376     177.448 157.712  -5.874  1.00 25.32      A    O
ATOM   2091  N   VAL A 377     178.204 159.683  -5.113  1.00 20.65      A    N
ATOM   2092  CA  VAL A 377     179.168 159.065  -4.241  1.00 19.06      A    C
ATOM   2093  CB  VAL A 377     180.021 160.117  -3.550  1.00 20.25      A    C
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ATOM   2094  CG1 VAL A 377     180.772 159.513  -2.415  1.00 14.07      A    C
ATOM   2095  CG2 VAL A 377     180.949 160.762  -4.587  1.00 16.78      A    C
ATOM   2096  C   VAL A 377     178.386 158.284  -3.229  1.00 20.23      A    C
ATOM   2097  O   VAL A 377     178.647 157.099  -3.037  1.00 20.59      A    O
ATOM   2098  N   LEU A 378     177.392 158.937  -2.620  1.00 20.07      A    N
ATOM   2099  CA  LEU A 378     176.526 158.314  -1.619  1.00 20.48      A    C
ATOM   2100  CB  LEU A 378     175.514 159.346  -1.107  1.00 19.33      A    C
ATOM   2101  CG  LEU A 378     175.794 160.087   0.237  1.00 25.33      A    C
ATOM   2102  CD1 LEU A 378     177.197 159.794   0.722  1.00 23.60      A    C
ATOM   2103  CD2 LEU A 378     175.575 161.610   0.073  1.00 20.05      A    C
ATOM   2104  C   LEU A 378     175.812 157.030  -2.120  1.00 22.64      A    C
ATOM   2105  O   LEU A 378     175.497 156.130  -1.318  1.00 21.93      A    O
ATOM   2106  N   GLU A 379     175.612 156.930  -3.435  1.00 19.85      A    N
ATOM   2107  CA  GLU A 379     174.972 155.756  -4.020  1.00 24.21      A    C
ATOM   2108  CB  GLU A 379     174.038 156.118  -5.171  1.00 29.18      A    C
ATOM   2109  CG  GLU A 379     173.003 157.140  -4.872  1.00 37.87      A    C
ATOM   2110  CD  GLU A 379     172.172 157.458  -6.104  1.00 44.63      A    C
ATOM   2111  OE1 GLU A 379     172.774 157.586  -7.214  1.00 47.26      A    O
ATOM   2112  OE2 GLU A 379     170.924 157.587  -5.961  1.00 46.30      A    O
ATOM   2113  C   GLU A 379     175.989 154.817  -4.623  1.00 22.35      A    C
ATOM   2114  O   GLU A 379     175.607 153.788  -5.180  1.00 22.07      A    O
ATOM   2115  N   HIS A 380     177.268 155.165  -4.555  1.00 20.53      A    N
ATOM   2116  CA  HIS A 380     178.278 154.301  -5.145  1.00 20.63      A    C
ATOM   2117  CB  HIS A 380     179.683 154.909  -4.995  1.00 15.41      A    C
ATOM   2118  CG  HIS A 380     180.717 154.184  -5.800  1.00 17.05      A    C
ATOM   2119  CD2 HIS A 380     181.309 154.493  -6.982  1.00 16.91      A    C
ATOM   2120  ND1 HIS A 380     181.129 152.901  -5.498  1.00 16.78      A    N
ATOM   2121  CE1 HIS A 380     181.918 152.453  -6.459  1.00 16.66      A    C
ATOM   2122  NE2 HIS A 380     182.042 153.399  -7.372  1.00 15.37      A    N
ATOM   2123  C   HIS A 380     178.209 152.904  -4.509  1.00 20.19      A    C
ATOM   2124  O   HIS A 380     178.129 152.774  -3.293  1.00 21.40      A    O
ATOM   2125  N   PRO A 381     178.231 151.843  -5.333  1.00 21.11      A    N
ATOM   2126  CD  PRO A 381     178.446 151.912  -6.792  1.00 20.62      A    C
ATOM   2127  CA  PRO A 381     178.165 150.440  -4.874  1.00 22.07      A    C
ATOM   2128  CB  PRO A 381     178.512 149.635  -6.139  1.00 23.24      A    C
ATOM   2129  CG  PRO A 381     177.998 150.510  -7.246  1.00 25.34      A    C
ATOM   2130  C   PRO A 381     179.103 150.109  -3.708  1.00 20.71      A    C
ATOM   2131  O   PRO A 381     178.722 149.416  -2.762  1.00 22.12      A    O
ATOM   2132  N   TRP A 382     180.330 150.607  -3.783  1.00 19.08      A    N
ATOM   2133  CA  TRP A 382     181.307 150.367  -2.733  1.00 18.09      A    C
ATOM   2134  CB  TRP A 382     182.667 150.885  -3.160  1.00 16.26      A    C
ATOM   2135  CG  TRP A 382     183.757 150.595  -2.180  1.00 17.75      A    C
ATOM   2136  CD2 TRP A 382     184.370 151.524  -1.271  1.00 17.24      A    C
ATOM   2137  CE2 TRP A 382     185.366 150.816  -0.559  1.00 16.47      A    C
ATOM   2138  CE3 TRP A 382     184.165 152.882  -0.983  1.00 17.55      A    C
ATOM   2139  CD1 TRP A 382     184.389 149.398  -1.986  1.00 14.76      A    C
ATOM   2140  NE1 TRP A 382     185.358 149.524  -1.022  1.00 16.65      A    N
ATOM   2141  CZ2 TRP A 382     186.168 151.422   0.421  1.00 15.85      A    C
ATOM   2142  CZ3 TRP A 382     184.965 153.487  -0.002  1.00 19.06      A    C
ATOM   2143  CH2 TRP A 382     185.951 152.754   0.687  1.00 17.35      A    C
ATOM   2144  C   TRP A 382     180.898 151.042  -1.431  1.00 18.11      A    C
ATOM   2145  O   TRP A 382     181.045 150.467  -0.352  1.00 19.08      A    O
ATOM   2146  N   ILE A 383     180.391 152.266  -1.533  1.00 18.03      A    N
ATOM   2147  CA  ILE A 383     179.963 153.003  -0.354  1.00 17.34      A    C
ATOM   2148  CB  ILE A 383     179.585 154.460  -0.709  1.00 15.70      A    C
ATOM   2149  CG2 ILE A 383     178.985 155.178   0.495  1.00 13.48      A    C
ATOM   2150  CG1 ILE A 383     180.841 155.212  -1.132  1.00  8.79      A    C
ATOM   2151  CD1 ILE A 383     181.809 155.455   0.019  1.00 11.19      A    C
ATOM   2152  C   ILE A 383     178.790 152.312   0.324  1.00 19.72      A    C
ATOM   2153  O   ILE A 383     178.851 152.044   1.523  1.00 21.11      A    O
ATOM   2154  N   THR A 384     177.739 151.994  -0.428  1.00 18.67      A    N
ATOM   2155  CA  THR A 384     176.585 151.336   0.180  1.00 21.04      A    C
ATOM   2156  CB  THR A 384     175.352 151.287  -0.784  1.00 22.27      A    C
ATOM   2157  OG1 THR A 384     175.657 150.457  -1.912  1.00 23.10      A    O
ATOM   2158  CG2 THR A 384     174.969 152.706  -1.271  1.00 15.14      A    C
ATOM   2159  C   THR A 384     176.868 149.921   0.721  1.00 20.77      A    C
ATOM   2160  O   THR A 384     176.220 149.496   1.683  1.00 24.40      A    O
ATOM   2161  N   ALA A 385     177.835 149.206   0.138  1.00 18.85      A    N
ATOM   2162  CA  ALA A 385     178.195 147.848   0.598  1.00 16.58      A    C
ATOM   2163  CB  ALA A 385     178.996 147.119  -0.481  1.00  8.89      A    C
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ATOM   2164  C   ALA A 385     179.021 147.877   1.890  1.00 19.30      A    C
ATOM   2165  O   ALA A 385     178.987 146.950   2.699  1.00 17.69      A    O
ATOM   2166  N   ASN A 386     179.748 148.966   2.104  1.00 23.78      A    N
ATOM   2167  CA  ASN A 386     180.614 149.059   3.274  1.00 24.44      A    C
ATOM   2168  CB  ASN A 386     182.039 149.240   2.783  1.00 22.82      A    C
ATOM   2169  CG  ASN A 386     182.509 148.051   1.997  1.00 22.92      A    C
ATOM   2170  OD1 ASN A 386     182.581 146.947   2.539  1.00 23.56      A    O
ATOM   2171  ND2 ASN A 386     182.807 148.251   0.706  1.00 20.68      A    N
ATOM   2172  C   ASN A 386     180.305 150.133   4.291  1.00 25.32      A    C
ATOM   2173  O   ASN A 386     180.891 150.175   5.366  1.00 25.70      A    O
ATOM   2174  N   SER A 387     179.385 151.009   3.950  1.00 28.67      A    N
ATOM   2175  CA  SER A 387     179.063 152.111   4.823  1.00 30.65      A    C
ATOM   2176  CB  SER A 387     178.507 153.232   3.955  1.00 29.51      A    C
ATOM   2177  OG  SER A 387     178.208 154.364   4.724  1.00 35.78      A    O
ATOM   2178  C   SER A 387     178.063 151.687   5.890  1.00 32.67      A    C
ATOM   2179  O   SER A 387     177.162 150.889   5.535  1.00 35.02      A    O
ATOM   2180  OXT SER A 387     178.173 152.164   7.055  1.00 35.90      A    O
ATOM   2181  CB  SER B   7     187.273 195.899  10.921  1.00 30.72      B    C
ATOM   2182  OG  SER B   7     185.919 195.490  11.062  1.00 28.92      B    O
ATOM   2183  C   SER B   7     187.728 193.792  12.227  1.00 32.69      B    C
ATOM   2184  O   SER B   7     187.932 192.918  11.331  1.00 33.35      B    O
ATOM   2185  N   SER B   7     189.583 195.368  11.576  1.00 34.34      B    N
ATOM   2186  CA  SER B   7     188.150 195.268  12.001  1.00 32.37      B    C
ATOM   2187  N   TYR B   8     187.139 193.527  13.402  1.00 28.10      B    N
ATOM   2188  CA  TYR B   8     186.671 192.188  13.775  1.00 25.10      B    C
ATOM   2189  CB  TYR B   8     187.465 191.681  14.999  1.00 22.64      B    C
ATOM   2190  CG  TYR B   8     188.962 191.579  14.731  1.00 22.03      B    C
ATOM   2191  CD1 TYR B   8     189.806 192.667  14.982  1.00 19.79      B    C
ATOM   2192  CE1 TYR B   8     191.153 192.623  14.642  1.00 19.33      B    C
ATOM   2193  CD2 TYR B   8     189.524 190.435  14.128  1.00 18.09      B    C
ATOM   2194  CE2 TYR B   8     190.881 190.391  13.775  1.00 18.91      B    C
ATOM   2195  CZ  TYR B   8     191.686 191.488  14.038  1.00 20.94      B    C
ATOM   2196  OH  TYR B   8     193.020 191.444  13.712  1.00 23.31      B    O
ATOM   2197  C   TYR B   8     185.151 192.143  14.045  1.00 24.33      B    C
ATOM   2198  O   TYR B   8     184.677 191.422  14.936  1.00 23.49      B    O
ATOM   2199  N   SER B   9     184.410 192.931  13.263  1.00 24.49      B    N
ATOM   2200  CA  SER B   9     182.945 193.017  13.314  1.00 24.46      B    C
ATOM   2201  CB  SER B   9     182.455 194.444  13.006  1.00 23.56      B    C
ATOM   2202  OG  SER B   9     182.756 195.336  14.059  1.00 29.98      B    O
ATOM   2203  C   SER B   9     182.426 192.085  12.229  1.00 22.36      B    C
ATOM   2204  O   SER B   9     182.469 192.408  11.035  1.00 22.10      B    O
ATOM   2205  N   TYR B  10     181.926 190.938  12.653  1.00 20.97      B    N
ATOM   2206  CA  TYR B  10     181.434 189.932  11.728  1.00 21.80      B    C
ATOM   2207  CB  TYR B  10     182.099 188.582  12.063  1.00 21.23      B    C
ATOM   2208  CG  TYR B  10     183.618 188.617  12.082  1.00 23.30      B    C
ATOM   2209  CD1 TYR B  10     184.345 187.694  12.836  1.00 24.95      B    C
ATOM   2210  CE1 TYR B  10     185.744 187.683  12.816  1.00 25.40      B    C
ATOM   2211  CD2 TYR B  10     184.331 189.542  11.311  1.00 23.55      B    C
ATOM   2212  CE2 TYR B  10     185.725 189.541  11.285  1.00 24.34      B    C
ATOM   2213  CZ  TYR B  10     186.421 188.600  12.036  1.00 26.19      B    C
ATOM   2214  OH  TYR B  10     187.800 188.526  11.956  1.00 31.92      B    O
ATOM   2215  C   TYR B  10     179.918 189.807  11.832  1.00 21.84      B    C
ATOM   2216  O   TYR B  10     179.334 190.098  12.872  1.00 22.91      B    O
ATOM   2217  N   ASP B  11     179.283 189.372  10.754  1.00 19.80      B    N
ATOM   2218  CA  ASP B  11     177.842 189.173  10.751  1.00 19.63      B    C
ATOM   2219  CB  ASP B  11     177.308 189.274   9.310  1.00 21.09      B    C
ATOM   2220  CG  ASP B  11     175.778 189.141   9.217  1.00 23.91      B    C
ATOM   2221  OD1 ASP B  11     175.093 188.957  10.256  1.00 24.67      B    O
ATOM   2222  OD2 ASP B  11     175.264 189.221   8.077  1.00 22.90      B    O
ATOM   2223  C   ASP B  11     177.653 187.756  11.297  1.00 19.67      B    C
ATOM   2224  O   ASP B  11     177.383 186.820  10.565  1.00 20.37      B    O
ATOM   2225  N   ALA B  12     177.844 187.593  12.590  1.00 19.26      B    N
ATOM   2226  CA  ALA B  12     177.696 186.285  13.174  1.00 19.72      B    C
ATOM   2227  CB  ALA B  12     178.993 185.498  13.013  1.00 20.60      B    C
ATOM   2228  C   ALA B  12     177.337 186.502  14.640  1.00 20.60      B    C
ATOM   2229  O   ALA B  12     177.450 187.632  15.149  1.00 20.41      B    O
ATOM   2230  N   PRO B  13     176.918 185.448  15.350  1.00 20.13      B    N
ATOM   2231  CD  PRO B  13     176.769 184.055  14.907  1.00 17.56      B    C
ATOM   2232  CA  PRO B  13     176.545 185.608  16.761  1.00 16.88      B    C
ATOM   2233  CB  PRO B  13     175.959 184.246  17.137  1.00 16.25      B    C
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ATOM   2234  CG  PRO B  13     175.670 183.563  15.811  1.00 18.64      B    C
ATOM   2235  C   PRO B  13     177.663 186.014  17.728  1.00 17.09      B    C
ATOM   2236  O   PRO B  13     178.797 185.573  17.590  1.00 17.90      B    O
ATOM   2237  N   SER B  14     177.334 186.839  18.720  1.00 17.14      B    N
ATOM   2238  CA  SER B  14     178.294 187.258  19.739  1.00 20.00      B    C
ATOM   2239  CB  SER B  14     179.094 188.499  19.294  1.00 19.42      B    C
ATOM   2240  OG  SER B  14     178.288 189.384  18.544  1.00 30.47      B    O
ATOM   2241  C   SER B  14     177.587 187.518  21.069  1.00 18.32      B    C
ATOM   2242  O   SER B  14     178.199 187.968  22.056  1.00 14.51      B    O
ATOM   2243  N   ASP B  15     176.297 187.215  21.076  1.00 18.48      B    N
ATOM   2244  CA  ASP B  15     175.445 187.376  22.248  1.00 23.79      B    C
ATOM   2245  CB  ASP B  15     173.991 187.526  21.783  1.00 30.49      B    C
ATOM   2246  CG  ASP B  15     173.676 188.932  21.226  1.00 39.83      B    C
ATOM   2247  OD1 ASP B  15     174.558 189.605  20.616  1.00 44.43      B    O
ATOM   2248  OD2 ASP B  15     172.510 189.378  21.401  1.00 45.45      B    O
ATOM   2249  C   ASP B  15     175.569 186.172  23.199  1.00 21.79      B    C
ATOM   2250  O   ASP B  15     175.594 185.035  22.754  1.00 22.39      B    O
ATOM   2251  N   PHE B  16     175.660 186.432  24.500  1.00 21.47      B    N
ATOM   2252  CA  PHE B  16     175.756 185.373  25.514  1.00 22.21      B    C
ATOM   2253  CB  PHE B  16     175.700 185.993  26.930  1.00 19.46      B    C
ATOM   2254  CG  PHE B  16     175.637 184.978  28.025  1.00 18.34      B    C
ATOM   2255  CD1 PHE B  16     176.789 184.362  28.491  1.00 18.98      B    C
ATOM   2256  CD2 PHE B  16     174.417 184.569  28.528  1.00 15.51      B    C
ATOM   2257  CE1 PHE B  16     176.716 183.339  29.435  1.00 18.59      B    C
ATOM   2258  CE2 PHE B  16     174.340 183.552  29.469  1.00 15.01      B    C
ATOM   2259  CZ  PHE B  16     175.488 182.939  29.921  1.00 15.05      B    C
ATOM   2260  C   PHE B  16     174.542 184.448  25.301  1.00 21.16      B    C
ATOM   2261  O   PHE B  16     173.442 184.938  25.058  1.00 21.78      B    O
ATOM   2262  N   ILE B  17     174.739 183.135  25.370  1.00 19.97      B    N
ATOM   2263  CA  ILE B  17     173.652 182.163  25.182  1.00 20.86      B    C
ATOM   2264  CB  ILE B  17     173.965 181.144  24.009  1.00 21.47      B    C
ATOM   2265  CG2 ILE B  17     172.988 179.964  24.011  1.00 11.76      B    C
ATOM   2266  CG1 ILE B  17     173.957 181.844  22.654  1.00 16.04      B    C
ATOM   2267  CD1 ILE B  17     174.760 181.051  21.631  1.00 18.42      B    C
ATOM   2268  C   ILE B  17     173.478 181.318  26.439  1.00 21.56      B    C
ATOM   2269  O   ILE B  17     174.462 180.965  27.086  1.00 23.11      B    O
ATOM   2270  N   ASN B  18     172.227 181.002  26.778  1.00 24.87      B    N
ATOM   2271  CA  ASN B  18     171.893 180.143  27.928  1.00 26.79      B    C
ATOM   2272  CB  ASN B  18     170.485 180.437  28.427  1.00 26.34      B    C
ATOM   2273  CG  ASN B  18     170.052 179.482  29.543  1.00 30.28      B    C
ATOM   2274  OD1 ASN B  18     170.753 178.519  29.870  1.00 30.01      B    O
ATOM   2275  ND2 ASN B  18     168.893 179.747  30.125  1.00 28.50      B    N
ATOM   2276  C   ASN B  18     171.911 178.718  27.373  1.00 28.06      B    C
ATOM   2277  O   ASN B  18     170.947 178.305  26.737  1.00 31.09      B    O
ATOM   2278  N   PHE B  19     172.969 177.950  27.616  1.00 30.32      B    N
ATOM   2279  CA  PHE B  19     173.027 176.599  27.050  1.00 32.46      B    C
ATOM   2280  CB  PHE B  19     174.460 176.061  27.076  1.00 27.50      B    C
ATOM   2281  CG  PHE B  19     175.430 176.837  26.214  1.00 22.59      B    C
ATOM   2282  CD1 PHE B  19     176.332 177.737  26.785  1.00 20.42      B    C
ATOM   2283  CD2 PHE B  19     175.426 176.682  24.831  1.00 21.89      B    C
ATOM   2284  CE1 PHE B  19     177.223 178.454  25.989  1.00 19.77      B    C
ATOM   2285  CE2 PHE B  19     176.312 177.398  24.021  1.00 18.13      B    C
ATOM   2286  CZ  PHE B  19     177.206 178.291  24.605  1.00 19.50      B    C
ATOM   2287  C   PHE B  19     172.086 175.529  27.618  1.00 36.90      B    C
ATOM   2288  O   PHE B  19     172.063 174.397  27.124  1.00 41.31      B    O
ATOM   2289  N   SER B  20     171.317 175.844  28.646  1.00 41.32      B    N
ATOM   2290  CA  SER B  20     170.402 174.824  29.142  1.00 46.46      B    C
ATOM   2291  CB  SER B  20     170.317 174.921  30.652  1.00 47.60      B    C
ATOM   2292  OG  SER B  20     170.456 176.275  31.032  1.00 49.62      B    O
ATOM   2293  C   SER B  20     169.029 175.021  28.496  1.00 48.43      B    C
ATOM   2294  O   SER B  20     168.337 174.060  28.170  1.00 50.43      B    O
ATOM   2295  N   SER B  21     168.645 176.275  28.286  1.00 50.08      B    N
ATOM   2296  CA  SER B  21     167.349 176.574  27.676  1.00 50.65      B    C
ATOM   2297  CB  SER B  21     166.742 177.810  28.317  1.00 49.82      B    C
ATOM   2298  OG  SER B  21     167.467 178.945  27.866  1.00 50.01      B    O
ATOM   2299  C   SER B  21     167.581 176.880  26.204  1.00 51.89      B    C
ATOM   2300  O   SER B  21     166.843 176.336  25.325  1.00 51.53      B    O
ATOM   2301  OXT SER B  21     168.482 177.716  25.953  1.00 53.54      B    O
ATOM   2302  CB  ASN C  30     165.336 177.781  10.155  1.00 41.18      C    C
ATOM   2303  CG  ASN C  30     164.486 178.568   9.178  1.00 46.58      C    C
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ATOM   2304  OD1 ASN C  30     164.828 179.693   8.808  1.00 49.62      C    O
ATOM   2305  ND2 ASN C  30     163.363 177.973   8.740  1.00 49.11      C    N
ATOM   2306  C   ASN C  30     167.301 179.381  10.314  1.00 36.00      C    C
ATOM   2307  O   ASN C  30     167.202 179.731   9.143  1.00 34.36      C    O
ATOM   2308  N   ASN C  30     165.267 179.744  11.676  1.00 37.72      C    N
ATOM   2309  CA  ASN C  30     166.154 178.688  11.078  1.00 38.33      C    C
ATOM   2310  N   ILE C  31     168.406 179.537  11.026  1.00 32.89      C    N
ATOM   2311  CA  ILE C  31     169.605 180.229  10.589  1.00 28.57      C    C
ATOM   2312  CB  ILE C  31     170.635 180.011  11.676  1.00 31.08      C    C
ATOM   2313  CG2 ILE C  31     171.873 180.840  11.426  1.00 30.71      C    C
ATOM   2314  CG1 ILE C  31     169.991 180.405  13.012  1.00 34.10      C    C
ATOM   2315  CD1 ILE C  31     169.738 181.909  13.147  1.00 41.37      C    C
ATOM   2316  C   ILE C  31     170.254 180.041   9.214  1.00 25.67      C    C
ATOM   2317  O   ILE C  31     170.816 180.996   8.677  1.00 20.90      C    O
ATOM   2318  N   ASP C  32     170.188 178.856   8.623  1.00 23.52      C    N
ATOM   2319  CA  ASP C  32     170.872 178.678   7.351  1.00 24.02      C    C
ATOM   2320  CB  ASP C  32     171.126 177.197   7.086  1.00 27.28      C    C
ATOM   2321  CG  ASP C  32     169.858 176.423   6.805  1.00 32.74      C    C
ATOM   2322  OD1 ASP C  32     168.852 177.009   6.338  1.00 36.15      C    O
ATOM   2323  OD2 ASP C  32     169.884 175.202   7.039  1.00 33.71      C    O
ATOM   2324  C   ASP C  32     170.289 179.324   6.104  1.00 23.19      C    C
ATOM   2325  O   ASP C  32     170.804 179.126   5.001  1.00 22.55      C    O
ATOM   2326  N   SER C  33     169.223 180.090   6.271  1.00 21.46      C    N
ATOM   2327  CA  SER C  33     168.608 180.781   5.136  1.00 22.57      C    C
ATOM   2328  CB  SER C  33     167.205 181.244   5.499  1.00 23.28      C    C
ATOM   2329  OG  SER C  33     166.326 180.142   5.639  1.00 33.59      C    O
ATOM   2330  C   SER C  33     169.448 182.002   4.805  1.00 19.49      C    C
ATOM   2331  O   SER C  33     169.273 182.639   3.770  1.00 20.33      C    O
ATOM   2332  N   TRP C  34     170.344 182.330   5.728  1.00 18.04      C    N
ATOM   2333  CA  TRP C  34     171.254 183.466   5.621  1.00 16.02      C    C
ATOM   2334  CB  TRP C  34     172.234 183.422   6.792  1.00 15.82      C    C
ATOM   2335  CG  TRP C  34     173.240 184.531   6.836  1.00 15.40      C    C
ATOM   2336  CD2 TRP C  34     174.599 184.462   6.404  1.00 13.15      C    C
ATOM   2337  CE2 TRP C  34     175.180 185.735   6.640  1.00 14.42      C    C
ATOM   2338  CE3 TRP C  34     175.387 183.451   5.843  1.00 10.87      C    C
ATOM   2339  CD1 TRP C  34     173.052 185.801   7.302  1.00 13.49      C    C
ATOM   2340  NE1 TRP C  34     174.212 186.530   7.189  1.00 11.42      C    N
ATOM   2341  CZ2 TRP C  34     176.523 186.024   6.330  1.00 14.91      C    C
ATOM   2342  CZ3 TRP C  34     176.727 183.738   5.538  1.00 12.26      C    C
ATOM   2343  CH2 TRP C  34     177.278 185.016   5.785  1.00 10.61      C    C
ATOM   2344  C   TRP C  34     172.022 183.499   4.299  1.00 15.62      C    C
ATOM   2345  O   TRP C  34     172.251 184.579   3.735  1.00 16.88      C    O
ATOM   2346  N   PHE C  35     172.435 182.324   3.819  1.00 13.45      C    N
ATOM   2347  CA  PHE C  35     173.191 182.222   2.567  1.00 12.33      C    C
ATOM   2348  CB  PHE C  35     173.739 180.801   2.344  1.00  8.78      C    C
ATOM   2349  CG  PHE C  35     174.597 180.304   3.456  1.00  9.30      C    C
ATOM   2350  CD1 PHE C  35     174.042 179.566   4.495  1.00  9.43      C    C
ATOM   2351  CD2 PHE C  35     175.960 180.610   3.500  1.00  9.38      C    C
ATOM   2352  CE1 PHE C  35     174.822 179.141   5.565  1.00  6.69      C    C
ATOM   2353  CE2 PHE C  35     176.749 180.190   4.569  1.00  8.62      C    C
ATOM   2354  CZ  PHE C  35     176.174 179.455   5.602  1.00 10.55      C    C
ATOM   2355  C   PHE C  35     172.367 182.623   1.351  1.00 13.51      C    C
ATOM   2356  O   PHE C  35     172.779 183.502   0.597  1.00 13.63      C    O
ATOM   2357  N   ALA C  36     171.207 181.997   1.153  1.00 14.52      C    N
ATOM   2358  CA  ALA C  36     170.392 182.349  -0.008  1.00 18.05      C    C
ATOM   2359  CB  ALA C  36     169.246 181.349  -0.209  1.00 13.28      C    C
ATOM   2360  C   ALA C  36     169.844 183.775   0.103  1.00 18.08      C    C
ATOM   2361  O   ALA C  36     169.797 184.500  -0.899  1.00 20.25      C    O
ATOM   2362  N   GLU C  37     169.458 184.192   1.307  1.00 18.61      C    N
ATOM   2363  CA  GLU C  37     168.905 185.536   1.505  1.00 21.91      C    C
ATOM   2364  CB  GLU C  37     168.391 185.686   2.933  1.00 22.41      C    C
ATOM   2365  CG  GLU C  37     167.103 184.901   3.240  1.00 24.75      C    C
ATOM   2366  CD  GLU C  37     166.619 185.133   4.681  1.00 30.55      C    C
ATOM   2367  OE1 GLU C  37     167.473 185.511   5.529  1.00 31.00      C    O
ATOM   2368  OE2 GLU C  37     165.414 184.932   4.976  1.00 30.11      C    O
ATOM   2369  C   GLU C  37     169.913 186.649   1.194  1.00 22.74      C    C
ATOM   2370  O   GLU C  37     169.561 187.754   0.791  1.00 22.40      C    O
ATOM   2371  N   LYS C  38     171.181 186.332   1.375  1.00 25.80      C    N
ATOM   2372  CA  LYS C  38     172.269 187.252   1.114  1.00 24.79      C    C
ATOM   2373  CB  LYS C  38     173.438 186.831   1.982  1.00 27.15      C    C
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ATOM   2374  CG  LYS C  38     174.708 187.488   1.649  1.00 30.16      C     C
ATOM   2375  CD  LYS C  38     175.776 187.057   2.622  1.00 31.96      C     C
ATOM   2376  CE  LYS C  38     177.007 187.927   2.391  1.00 35.28      C     C
ATOM   2377  NZ  LYS C  38     178.028 187.735   3.456  1.00 40.31      C     N
ATOM   2378  C   LYS C  38     172.625 187.194  -0.373  1.00 25.05      C     C
ATOM   2379  O   LYS C  38     173.062 188.177  -0.969  1.00 23.54      C     O
ATOM   2380  N   ALA C  39     172.418 186.032  -0.975  1.00 23.76      C     N
ATOM   2381  CA  ALA C  39     172.687 185.849  -2.400  1.00 23.35      C     C
ATOM   2382  CB  ALA C  39     172.656 184.343  -2.762  1.00 20.98      C     C
ATOM   2383  C   ALA C  39     171.642 186.576  -3.245  1.00 24.77      C     C
ATOM   2384  O   ALA C  39     171.950 187.112  -4.318  1.00 24.28      C     O
ATOM   2385  N   ASN C  40     170.403 186.592  -2.754  1.00 23.38      C     N
ATOM   2386  CA  ASN C  40     169.306 187.210  -3.480  1.00 23.68      C     C
ATOM   2387  CB  ASN C  40     167.993 186.526  -3.137  1.00 18.03      C     C
ATOM   2388  CG  ASN C  40     168.024 185.035  -3.395  1.00 17.89      C     C
ATOM   2389  OD1 ASN C  40     168.646 184.553  -4.351  1.00 18.06      C     O
ATOM   2390  ND2 ASN C  40     167.325 184.287  -2.545  1.00 16.76      C     N
ATOM   2391  C   ASN C  40     169.122 188.701  -3.279  1.00 25.17      C     C
ATOM   2392  O   ASN C  40     168.413 189.332  -4.052  1.00 27.11      C     O
ATOM   2393  N   LEU C  41     169.731 189.268  -2.246  1.00 26.95      C     N
ATOM   2394  CA  LEU C  41     169.600 190.709  -1.965  1.00 29.31      C     C
ATOM   2395  CB  LEU C  41     170.380 191.047  -0.705  1.00 29.88      C     C
ATOM   2396  CG  LEU C  41     169.816 192.308  -0.057  1.00 30.53      C     C
ATOM   2397  CD1 LEU C  41     168.319 192.148   0.221  1.00 30.41      C     C
ATOM   2398  CD2 LEU C  41     170.580 192.558   1.209  1.00 29.64      C     C
ATOM   2399  C   LEU C  41     170.091 191.589  -3.120  1.00 29.84      C     C
ATOM   2400  O   LEU C  41     171.051 191.230  -3.787  1.00 30.13      C     O
ATOM   2401  N   GLU C  42     169.487 192.763  -3.312  1.00 32.17      C     N
ATOM   2402  CA  GLU C  42     169.851 193.627  -4.439  1.00 35.33      C     C
ATOM   2403  CB  GLU C  42     168.583 193.847  -5.286  1.00 33.50      C     C
ATOM   2404  CG  GLU C  42     167.819 192.560  -5.616  1.00 32.30      C     C
ATOM   2405  CD  GLU C  42     166.473 192.784  -6.334  1.00 34.80      C     C
ATOM   2406  OE1 GLU C  42     165.892 193.892  -6.241  1.00 34.22      C     O
ATOM   2407  OE2 GLU C  42     165.980 191.829  -6.987  1.00 33.99      C     O
ATOM   2408  C   GLU C  42     170.537 194.977  -4.190  1.00 37.36      C     C
ATOM   2409  O   GLU C  42     170.487 195.539  -3.109  1.00 38.22      C     O
ATOM   2410  N   ASN C  43     171.220 195.457  -5.221  1.00 43.15      C     N
ATOM   2411  CA  ASN C  43     171.863 196.790  -5.266  1.00 48.74      C     C
ATOM   2412  CB  ASN C  43     172.611 197.184  -3.967  1.00 48.84      C     C
ATOM   2413  CG  ASN C  43     173.769 196.255  -3.632  1.00 50.97      C     C
ATOM   2414  OD1 ASN C  43     173.749 195.054  -3.970  1.00 50.34      C     O
ATOM   2415  ND2 ASN C  43     174.793 196.804  -2.939  1.00 51.10      C     N
ATOM   2416  C   ASN C  43     172.809 196.704  -6.455  1.00 52.67      C     C
ATOM   2417  O   ASN C  43     172.493 197.379  -7.493  1.00 54.34      C     O
ATOM   2418  OXT ASN C  43     173.808 195.931  -6.344  1.00 55.98      C     O
ATOM   2419  PB  ADP S 531     193.788 175.824  12.432  1.00 20.87      S     P
ATOM   2420  O1B ADP S 531     193.884 176.352  13.792  1.00 32.28      S     O
ATOM   2421  O2B ADP S 531     193.566 176.837  11.394  1.00 26.12      S     O
ATOM   2422  O3B ADP S 531     194.979 174.908  12.132  1.00 31.89      S     O
ATOM   2423  PA  ADP S 531     191.748 174.063  13.545  1.00 18.35      S     P
ATOM   2424  O1A ADP S 531     190.611 174.901  14.032  1.00 26.99      S     O
ATOM   2425  O2A ADP S 531     191.357 172.755  12.954  1.00 26.80      S     O
ATOM   2426  O3A ADP S 531     192.532 174.874  12.450  1.00 28.14      S     O
ATOM   2427  O5* ADP S 531     192.642 173.906  14.839  1.00 22.21      S     O
ATOM   2428  C5* ADP S 531     193.768 172.965  14.869  1.00 20.71      S     C
ATOM   2429  C4* ADP S 531     193.594 171.623  15.640  1.00 17.30      S     C
ATOM   2430  O4* ADP S 531     192.923 171.842  16.897  1.00 18.08      S     O
ATOM   2431  C3* ADP S 531     192.751 170.494  14.997  1.00 17.80      S     C
ATOM   2432  O3* ADP S 531     193.561 169.824  14.038  1.00 18.78      S     O
ATOM   2433  C2* ADP S 531     192.369 169.659  16.218  1.00 19.78      S     C
ATOM   2434  O2* ADP S 531     193.423 168.749  16.615  1.00 19.10      S     O
ATOM   2435  C1* ADP S 531     192.152 170.704  17.312  1.00 18.01      S     C
ATOM   2436  N9  ADP S 531     190.711 171.169  17.445  1.00 18.12      S     N
ATOM   2437  C8  ADP S 531     190.169 172.237  16.808  1.00 20.72      S     C
ATOM   2438  N7  ADP S 531     188.877 172.431  17.108  1.00 19.94      S     N
ATOM   2439  C5  ADP S 531     188.596 171.408  17.961  1.00 15.87      S     C
ATOM   2440  C6  ADP S 531     187.377 171.071  18.652  1.00 14.49      S     C
ATOM   2441  N6  ADP S 531     186.260 171.696  18.563  1.00  9.66      S     N
ATOM   2442  N1  ADP S 531     187.474 169.935  19.454  1.00 13.01      S     N
ATOM   2443  C2  ADP S 531     188.642 169.198  19.595  1.00 14.56      S     C
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ATOM	2444	N3	ADP	S	531	189.773	169.512	18.982	1.00	17.25	S	N
ATOM	2445	C4	ADP	S	531	189.716	170.610	18.162	1.00	16.09	S	C
ATOM	2446	MG	MG	X	1	192.801	173.013	10.897	1.00	18.98	X	MG+2
ATOM	2447	MG	MG	X	2	192.933	178.461	10.215	1.00	21.17	X	MG+2
ATOM	2448	MG	MG	X	3	174.135	172.090	-6.081	1.00	37.43	X	MG+2
ATOM	2449	S	SO4	Y	1	175.520	167.060	-4.810	1.00	40.27	Y	S
ATOM	2450	O1	SO4	Y	1	175.005	168.134	-3.755	1.00	40.61	Y	O
ATOM	2451	O2	SO4	Y	1	176.918	167.395	-5.118	1.00	40.85	Y	O
ATOM	2452	O3	SO4	Y	1	175.333	165.874	-4.319	1.00	45.29	Y	O
ATOM	2453	O4	SO4	Y	1	174.705	167.387	-6.003	1.00	46.53	Y	O
ATOM	2454	S	SO4	Y	2	196.317	160.442	22.149	1.00	52.91	Y	S
ATOM	2455	O1	SO4	Y	2	194.902	160.702	22.904	1.00	53.25	Y	O
ATOM	2456	O2	SO4	Y	2	197.156	161.615	22.484	1.00	52.23	Y	O
ATOM	2457	O3	SO4	Y	2	196.808	159.261	22.506	1.00	50.45	Y	O
ATOM	2458	O4	SO4	Y	2	195.932	160.567	20.717	1.00	53.17	Y	O
ATOM	2459	S	SO4	Y	3	184.237	187.281	-0.473	1.00	69.64	Y	S
ATOM	2460	O1	SO4	Y	3	182.905	188.209	-0.613	1.00	70.60	Y	O
ATOM	2461	O2	SO4	Y	3	185.274	188.143	0.172	1.00	70.08	Y	O
ATOM	2462	O3	SO4	Y	3	183.925	186.181	0.170	1.00	69.68	Y	O
ATOM	2463	O4	SO4	Y	3	184.641	187.119	-1.915	1.00	70.92	Y	O
ATOM	2464	OH2	WAT	W	1	179.030	185.642	-6.293	1.00	8.84	W	O
ATOM	2465	OH2	WAT	W	2	194.313	179.202	-8.444	1.00	16.79	W	O
ATOM	2466	OH2	WAT	W	3	192.921	180.168	8.084	1.00	30.46	W	O
ATOM	2467	OH2	WAT	W	4	187.994	175.656	4.804	1.00	16.00	W	O
ATOM	2468	OH2	WAT	W	5	178.455	169.305	-5.499	1.00	13.87	W	O
ATOM	2469	OH2	WAT	W	6	197.111	180.066	22.244	1.00	15.19	W	O
ATOM	2470	OH2	WAT	W	7	180.414	171.384	22.814	1.00	8.30	W	O
ATOM	2471	OH2	WAT	W	8	188.179	184.543	-6.390	1.00	10.24	W	O
ATOM	2472	OH2	WAT	W	9	188.183	181.649	3.509	1.00	23.15	W	O
ATOM	2473	OH2	WAT	W	10	185.065	157.114	14.496	1.00	16.39	W	O
ATOM	2474	OH2	WAT	W	11	192.854	158.543	18.441	1.00	20.42	W	O
ATOM	2475	OH2	WAT	W	12	194.144	171.703	11.618	1.00	13.61	W	O
ATOM	2476	OH2	WAT	W	13	194.572	183.197	-8.077	1.00	36.64	W	O
ATOM	2477	OH2	WAT	W	14	198.254	147.344	-7.377	1.00	23.99	W	O
ATOM	2478	OH2	WAT	W	15	174.141	170.073	-2.678	1.00	18.36	W	O
ATOM	2479	OH2	WAT	W	16	197.136	162.247	7.860	1.00	20.24	W	O
ATOM	2480	OH2	WAT	W	17	178.742	175.122	-2.821	1.00	12.41	W	O
ATOM	2481	OH2	WAT	W	18	200.365	168.406	2.165	1.00	9.98	W	O
ATOM	2482	OH2	WAT	W	19	168.522	176.594	9.704	1.00	27.47	W	O
ATOM	2483	OH2	WAT	W	20	193.215	179.995	11.973	1.00	17.15	W	O
ATOM	2484	OH2	WAT	W	21	188.165	173.468	14.493	1.00	18.83	W	O
ATOM	2485	OH2	WAT	W	22	178.977	189.493	5.006	1.00	25.99	W	O
ATOM	2486	OH2	WAT	W	23	194.904	178.835	14.332	1.00	9.84	W	O
ATOM	2487	OH2	WAT	W	24	172.594	187.824	25.336	1.00	22.88	W	O
ATOM	2488	OH2	WAT	W	25	186.612	173.366	-9.877	1.00	19.22	W	O
ATOM	2489	OH2	WAT	W	26	176.840	183.702	20.193	1.00	22.57	W	O
ATOM	2490	OH2	WAT	W	27	176.801	160.388	11.646	1.00	15.90	W	O
ATOM	2491	OH2	WAT	W	28	178.487	174.788	11.702	1.00	18.10	W	O
ATOM	2492	OH2	WAT	W	29	181.155	186.952	32.619	1.00	32.00	W	O
ATOM	2493	OH2	WAT	W	30	209.304	163.564	-16.281	1.00	27.44	W	O
ATOM	2494	OH2	WAT	W	31	203.827	165.930	-0.838	1.00	16.37	W	O
ATOM	2495	OH2	WAT	W	32	183.937	190.638	21.333	1.00	17.02	W	O
ATOM	2496	OH2	WAT	W	33	190.362	181.451	8.363	1.00	23.84	W	O
ATOM	2497	OH2	WAT	W	34	201.524	183.136	11.412	1.00	27.78	W	O
ATOM	2498	OH2	WAT	W	35	176.401	172.283	12.285	1.00	22.44	W	O
ATOM	2499	OH2	WAT	W	36	191.486	178.801	-8.556	1.00	14.47	W	O
ATOM	2500	OH2	WAT	W	37	193.706	178.975	16.555	1.00	28.73	W	O
ATOM	2501	OH2	WAT	W	38	200.711	191.015	5.492	1.00	22.39	W	O
ATOM	2502	OH2	WAT	W	39	198.698	163.980	-2.087	1.00	16.88	W	O
ATOM	2503	OH2	WAT	W	40	186.096	174.714	13.402	1.00	14.25	W	O
ATOM	2504	OH2	WAT	W	41	189.561	189.228	27.405	1.00	21.42	W	O
ATOM	2505	OH2	WAT	W	42	185.742	175.020	-12.633	1.00	32.61	W	O
ATOM	2506	OH2	WAT	W	43	189.284	166.218	21.436	1.00	18.57	W	O
ATOM	2507	OH2	WAT	W	44	189.806	150.396	10.582	1.00	17.00	W	O
ATOM	2508	OH2	WAT	W	45	182.606	183.843	1.498	1.00	23.82	W	O
ATOM	2509	OH2	WAT	W	46	203.088	159.272	-4.093	1.00	20.75	W	O
ATOM	2510	OH2	WAT	W	47	197.775	190.097	18.980	1.00	22.00	W	O
ATOM	2511	OH2	WAT	W	48	193.113	164.352	18.292	1.00	18.52	W	O
ATOM	2512	OH2	WAT	W	49	188.303	192.170	8.139	1.00	29.33	W	O
ATOM	2513	OH2	WAT	W	50	178.988	188.073	29.292	1.00	22.03	W	O

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ATOM   2514  OH2 WAT W  51     179.041 176.835  -4.879  1.00 28.93      W    O
ATOM   2515  OH2 WAT W  52     177.094 169.275  14.745  1.00 17.83      W    O
ATOM   2516  OH2 WAT W  53     173.359 158.848   5.717  1.00 26.69      W    O
ATOM   2517  OH2 WAT W  54     184.713 145.517  -1.099  1.00 25.66      W    O
ATOM   2518  OH2 WAT W  55     197.989 162.673  24.709  1.00 31.35      W    O
ATOM   2519  OH2 WAT W  56     190.279 149.132  -0.366  1.00 23.37      W    O
ATOM   2520  OH2 WAT W  57     175.195 156.308   1.515  1.00 25.31      W    O
ATOM   2521  OH2 WAT W  58     189.320 149.244  12.871  1.00 39.74      W    O
ATOM   2522  OH2 WAT W  59     191.345 160.562  17.366  1.00 19.61      W    O
ATOM   2523  OH2 WAT W  60     209.300 189.438  10.191  1.00 32.59      W    O
ATOM   2524  OH2 WAT W  61     176.961 195.154  23.343  1.00 26.84      W    O
ATOM   2525  OH2 WAT W  62     194.908 178.479  10.038  1.00 12.42      W    O
ATOM   2526  OH2 WAT W  63     192.932 176.681   8.727  1.00 17.49      W    O
ATOM   2527  OH2 WAT W  64     191.151 178.650  10.287  1.00 25.58      W    O
ATOM   2528  OH2 WAT W  65     182.000 183.023 -13.348  1.00 15.88      W    O
ATOM   2529  OH2 WAT W  66     174.844 179.377  29.234  1.00 21.85      W    O
ATOM   2530  OH2 WAT W  67     192.666 150.025   4.037  1.00 24.70      W    O
ATOM   2531  OH2 WAT W  68     191.227 167.117  19.848  1.00 27.52      W    O
ATOM   2532  OH2 WAT W  69     195.798 166.787  -4.678  1.00 16.05      W    O
ATOM   2533  OH2 WAT W  70     188.683 164.953  24.250  1.00 16.65      W    O
ATOM   2534  OH2 WAT W  71     202.921 187.953   5.807  1.00 25.48      W    O
ATOM   2535  OH2 WAT W  72     173.656 180.838  -1.296  1.00 19.16      W    O
ATOM   2536  OH2 WAT W  73     178.223 170.722  21.753  1.00 28.96      W    O
ATOM   2537  OH2 WAT W  74     200.047 185.273   4.691  1.00 36.63      W    O
ATOM   2538  OH2 WAT W  75     199.421 160.492  21.694  1.00 54.41      W    O
ATOM   2539  OH2 WAT W  76     174.343 151.575  -4.090  1.00 24.22      W    O
ATOM   2540  OH2 WAT W  77     199.217 156.232   8.084  1.00 24.50      W    O
ATOM   2541  OH2 WAT W  78     186.693 195.451  15.184  1.00 30.28      W    O
ATOM   2542  OH2 WAT W  79     204.072 167.051 -16.474  1.00 30.81      W    O
ATOM   2543  OH2 WAT W  80     189.729 170.883  13.071  1.00 24.00      W    O
ATOM   2544  OH2 WAT W  81     193.562 167.033  18.576  1.00 34.40      W    O
ATOM   2545  OH2 WAT W  82     188.055 177.150 -16.174  1.00 39.31      W    O
ATOM   2546  OH2 WAT W  83     209.167 161.801  -3.764  1.00 29.76      W    O
ATOM   2547  OH2 WAT W  84     189.954 187.203  -3.104  1.00 30.21      W    O
ATOM   2548  OH2 WAT W  85     166.356 175.210   9.226  1.00 35.64      W    O
ATOM   2549  OH2 WAT W  86     209.038 162.643 -13.951  1.00 29.71      W    O
ATOM   2550  OH2 WAT W  87     179.913 164.861  20.417  1.00 23.03      W    O
ATOM   2551  OH2 WAT W  88     176.985 177.272  13.711  1.00 28.39      W    O
ATOM   2552  OH2 WAT W  89     197.775 160.663  10.355  1.00 30.90      W    O
ATOM   2553  OH2 WAT W  90     180.418 156.423 -15.983  1.00 38.69      W    O
ATOM   2554  OH2 WAT W  91     197.603 165.048   7.104  1.00 39.85      W    O
ATOM   2555  OH2 WAT W  92     201.038 146.684  -3.627  1.00 28.72      W    O
ATOM   2556  OH2 WAT W  93     191.798 173.307  -1.526  1.00 20.55      W    O
ATOM   2557  OH2 WAT W  94     195.433 186.638   2.426  1.00 32.36      W    O
ATOM   2558  OH2 WAT W  95     185.689 149.073  10.194  1.00 32.44      W    O
ATOM   2559  OH2 WAT W  96     181.725 186.361   4.468  1.00 44.13      W    O
ATOM   2560  OH2 WAT W  97     190.638 181.376   1.418  1.00 40.50      W    O
ATOM   2561  OH2 WAT W  98     203.221 164.983   2.765  1.00 30.78      W    O
ATOM   2562  OH2 WAT W  99     191.430 148.459   1.931  1.00 29.87      W    O
ATOM   2563  OH2 WAT W 100     172.186 178.856  -0.480  1.00 35.57      W    O
ATOM   2564  OH2 WAT W 101     195.541 178.234   1.979  1.00 25.17      W    O
ATOM   2565  OH2 WAT W 102     170.598 187.029  21.078  1.00 24.60      W    O
ATOM   2566  OH2 WAT W 103     175.607 172.274  -8.036  1.00 36.47      W    O
ATOM   2567  OH2 WAT W 104     168.429 188.864  -6.367  1.00 22.94      W    O
ATOM   2568  OH2 WAT W 105     186.340 190.812  24.666  1.00 32.99      W    O
ATOM   2569  OH2 WAT W 106     201.816 192.555   4.023  1.00 28.31      W    O
ATOM   2570  OH2 WAT W 107     202.504 159.814  -7.441  1.00 22.58      W    O
ATOM   2571  OH2 WAT W 108     174.542 185.298 -11.131  1.00 31.96      W    O
ATOM   2572  OH2 WAT W 109     175.457 179.403  15.662  1.00 39.35      W    O
ATOM   2573  OH2 WAT W 110     196.564 193.700   7.818  1.00 32.38      W    O
ATOM   2574  OH2 WAT W 111     173.232 181.808  -8.349  1.00 19.06      W    O
ATOM   2575  OH2 WAT W 112     182.827 187.517  -4.364  1.00 45.61      W    O
ATOM   2576  OH2 WAT W 113     189.838 194.231   7.217  1.00 42.16      W    O
ATOM   2577  OH2 WAT W 114     191.170 159.628 -12.340  1.00 35.35      W    O
ATOM   2578  OH2 WAT W 115     191.207 184.866  -0.535  1.00 34.38      W    O
ATOM   2579  OH2 WAT W 116     183.572 197.288  15.706  1.00 39.58      W    O
ATOM   2580  OH2 WAT W 117     199.841 150.695  13.176  1.00 35.40      W    O
ATOM   2581  OH2 WAT W 118     174.316 180.622  18.227  1.00 29.36      W    O
ATOM   2582  OH2 WAT W 119     174.539 169.945  15.478  1.00 36.75      W    O
ATOM   2583  OH2 WAT W 120     186.965 189.198  27.316  1.00 33.73      W    O
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ATOM	2584	OH2	WAT	W	121	185.505	146.137	-4.208	1.00	30.91	W	O
ATOM	2585	OH2	WAT	W	122	168.783	176.131	0.277	1.00	37.59	W	O
ATOM	2586	OH2	WAT	W	123	179.830	187.974	34.894	1.00	39.81	W	O
ATOM	2587	OH2	WAT	W	124	194.391	191.022	26.003	1.00	35.26	W	O
ATOM	2588	OH2	WAT	W	125	175.707	190.116	18.448	1.00	37.47	W	O
ATOM	2589	OH2	WAT	W	126	172.799	187.052	31.328	1.00	38.58	W	O
ATOM	2590	OH2	WAT	W	127	173.867	181.212	14.618	1.00	28.93	W	O
ATOM	2591	OH2	WAT	W	128	169.850	183.554	9.734	1.00	31.19	W	O
ATOM	2592	OH2	WAT	W	129	201.846	186.034	10.890	1.00	39.65	W	O
ATOM	2593	OH2	WAT	W	130	192.261	183.101	8.973	1.00	35.20	W	O
ATOM	2594	OH2	WAT	W	131	195.036	155.601	22.286	1.00	43.08	W	O
ATOM	2595	OH2	WAT	W	132	188.136	149.463	-10.689	1.00	31.69	W	O
ATOM	2596	OH2	WAT	W	133	193.611	166.439	22.911	1.00	37.73	W	O
ATOM	2597	OH2	WAT	W	134	169.159	198.181	-6.371	1.00	34.05	W	O
ATOM	2598	OH2	WAT	W	135	173.141	166.101	3.246	1.00	37.73	W	O
ATOM	2599	OH2	WAT	W	136	196.411	181.887	24.452	1.00	31.18	W	O
ATOM	2600	OH2	WAT	W	137	166.875	190.046	-8.389	1.00	35.44	W	O
ATOM	2601	OH2	WAT	W	138	168.310	173.985	5.026	1.00	36.83	W	O
ATOM	2602	OH2	WAT	W	139	191.553	162.337	-15.173	1.00	30.34	W	O
ATOM	2603	OH2	WAT	W	140	196.789	179.956	0.077	1.00	34.96	W	O
ATOM	2604	OH2	WAT	W	141	204.362	177.082	-3.998	1.00	42.74	W	O
ATOM	2605	OH2	WAT	W	142	178.237	157.118	15.427	1.00	37.51	W	O
ATOM	2606	OH2	WAT	W	143	180.703	166.918	18.919	1.00	22.25	W	O
ATOM	2607	OH2	WAT	W	144	190.076	196.775	13.865	1.00	38.81	W	O